



U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Registration Division (7505P)
 1200 Pennsylvania Ave., N.W.
 Washington, D.C. 20460

EPA Reg. Number:

55467-17

Date of Issuance:

7/2/19

NOTICE OF PESTICIDE:

Registration
 Reregistration
 (under FIFRA, as amended)

Term of Issuance:

Unconditional

Name of Pesticide Product:

Volunteer 2EC Herbicide

Name and Address of Registrant (include ZIP Code):

Tenkoz Inc
 1725 Windward Concourse, Suite 410
 Alpharetta, GA 30005

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) provided that you:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product when the Agency requires all registrants of similar products to submit such data.
2. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

Signature of Approving Official:

Reuben Baris, Product Manager 25
 Herbicides Branch, Registration Division (7505P)

Date:

7/2/19

3. Make the following label changes before you release the product for shipment:
 - Revise the EPA Registration Number to read, “EPA Reg. No. 55467-17.”
4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company’s website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product’s label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA’s Office of Enforcement and Compliance.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 06/07/2019

If you have any questions, please contact Julia Kerr by phone at 703-347-0386, or via email at kerr.julia@epa.gov

Enclosure

VOLUNTEER 2EC

CLETHODIM	GROUP	1	HERBICIDE
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ACTIVE INGREDIENT:	By Wt.
Clethodim: (E)-2-[1-[[3-chloro-2-propenyl)oxy]imino]propyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one	26.4%
OTHER INGREDIENTS:	<u>73.6%</u>
TOTAL:	100.0%

Contains petroleum distillates.
Contains 2.0 lbs. clethodim per gallon.

KEEP OUT OF REACH OF CHILDREN WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail).

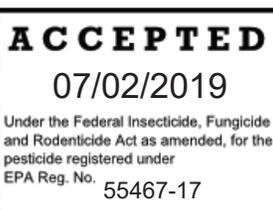
FIRST AID	
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none"> • Immediately call a poison control center or doctor. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give any liquid to the person. • Do not give anything by mouth to an unconscious person.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. FOR MEDICAL Emergencies call CHEMTREC at telephone no. 1-800-424-9300. For PRODUCT USE Information call telephone no. 770-343-8509.	
NOTE TO PHYSICIAN	
Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause pneumonitis. If ingested, probable mucosal damage may contraindicate the use of gastric lavage.	

See side panel for additional PRECAUTIONARY STATEMENTS.

EPA Reg. No. 55467-XX

Manufactured for:

Tenkoz, Inc.
1725 Windward Concourse, Suite 410
Alpharetta, GA



EPA Est. No.

Net Contents:

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING**

Causes substantial but temporary eye irritation. Avoid contact with skin. Do not get in eyes, on skin, or on clothing. Harmful if swallowed or inhaled. Avoid breathing vapors or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as barrier laminate or viton \geq 14 mils
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside, then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply where runoff is likely to occur. Do not apply where weather conditions favor drift from areas treated. Do not contaminate water when disposing of equipment washwater or rinsate.

The use of this product may pose a hazard to the federally designated endangered species of Solano Grass and Wild Rice. Use of this product is prohibited in the following areas where the species are known to exist:

Solano Grass: Solano County, California: the vernal lakes area bounded by the Union Pacific Railroad and Hastings Road to the north, Highway 113 to the east, Highway 12 to the south, and Travis Air Force Base to the west.

Wild Rice: Hays County, Texas.

Non-Target Organism Advisory Statement: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat for open flame. Do not mix or allow contact with oxidizing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

READ ENTIRE LABEL BEFORE USE. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your state or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is:

- Coveralls
- Chemical-resistant gloves such as barrier laminate or viton \geq 14 mils
- Shoes plus socks
- Protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standards for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep all unprotected persons out of operating areas, or vicinity where there may be drift. Do not enter treated areas without protective clothing until sprays have dried.

PRODUCT INFORMATION

For use on: Alfalfa, Artichoke (Globe), Asparagus, Bean (dry) and Pea (shelled)¹, Bean and Pea (succulent shelled)², Broccoli, Bushberry³, Cabbage, Caneberry⁴, Canola*, Carrot, Cauliflower (and other Head and Stem Brassica Vegetables)⁵, Celery, Clover (grown in Idaho, Oregon and Washington only), Conifers, Cotton, Cranberry, Cucumber, Eggplant (and other Fruiting Vegetables)⁶, Fallow Land (and other non-producing agricultural areas), Flax*, Field Corn⁷, Garden Beet, Garlic, Herbs⁸, Hops, Horseradish (and other Root Vegetables)⁹, Legume Vegetables (edible podded)¹⁰, Lettuce, Head and Leaf (and other leafy greens)¹¹, Melons (including Cantaloupes and Watermelons)¹², Mint, Mustard Greens (and other leafy brassica greens)¹³, Mustard Seed*, Non-Bearing Food Crops, Non-Crop or Non-Planted Areas, Onions (dry bulb and green), Ornamentals, Peaches, Peanut (including perennial), Peppers (bell and non-bell), Potato, Radish, Rhubarb (and other Leaf Petioles)¹⁴, Safflower, Sesame, Shallots (dry bulbs and green), Squash (including Pumpkins)¹², Soybeans, Strawberry, Sugar Beet, Sunflower, Sweet Potato, Tomato, Turnip Greens and Yam (and other Tuberous and Corm Vegetables)¹⁵

***Not for use in California**

- 1 Other Bean (dry) and Pea (shelled) crops approved for use with VOLUNTEER 2EC include: Bean (*Lupinus* spp.), grain lupin, sweet lupin, white lupin and white sweet lupin; Bean (*Phaseolus* spp.), field, kidney, lima (dry), navy, pinto and tepary; Bean (*Vigna* spp.), adzuki bean, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, broad (dry), chickpea (garbanzo), guar, lablab bean and lentil; Pea (*Pisum* spp.), field and pigeon.
- 2 Other Bean and Pea (succulent shelled) crops approved for use with VOLUNTEER 2EC includes: Bean (*Lupinus* spp.), broad bean (succulent), lima bean (green); Bean (*Vigna* spp.), adzuki bean, black-eyed pea, catjang, cowpea, crowder pea, moth bean, mung bean, rice bean, Southern Pea, urd bean, broad (dry), chickpea (garbanzo), guar, lablab bean and lentil; Pea (*Pisum* spp.), field and pigeon.
- 3 Other bushberry crops approved for use with VOLUNTEER 2EC include: Aronia berry, blueberry (highbush), black currant, Buffalo currant, Chilean guava, cranberry (highbush), Elderberry, European barberry, gooseberry, honeysuckle (edible), huckleberry (edible), Jostaberry, Juneberry (Saskatoon berry), native currant, salal, sea buckthorn, red currant; cultivars, varieties and/or hybrids of these.⁴
- 4 Other caneberry crops approved for use with VOLUNTEER 2EC include: blackberry, loganberry, raspberry (black and red), wild raspberry; cultivars, varieties and/or hybrids of these.
- 5 Other head and stem brassica vegetables approved for use with VOLUNTEER 2EC include: Chinese broccoli, Brussels sprouts, Chinese (napa) cabbage, Chinese mustard, cavalo broccolo and kohlrabi.
- 6 Other Fruiting Vegetables (except tomato) approved for use with VOLUNTEER 2EC include: eggplant, groundcherry, pepino, peppers (all) and tomatillo.
- 7 For burndown of existing stand of Roundup Ready field corn or volunteer Roundup Ready field corn prior to replanting field corn.
- 8 Other Herb crops approved for use with VOLUNTEER 2EC include: angelica, balm, basil, borage, burnet, camomile, catnip, chervil (dried), chive, Chinese chive, clary, coriander (leaf), costmary, culantro (leaf), curry (leaf), dill (dillweed), horehound, hyssop, lavender, lovage (leaf), marigold, marjoram (*origanum* spp.), nasturtium, parsley (dried), pennyroyal, rosemary, rue, sage and savory, summer and winter.
- 9 Other root vegetables approved for use with VOLUNTEER 2EC include: burdock, edible; celeriac; chervil, turnip-rooted; chicory; ginseng; parsely, turnip-rooted; parsnip; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret and turnip.
- 10 Other Edible Podded Legume Vegetable crops approved for use with VOLUNTEER 2EC include: Bean (*Phaseolus* spp.), runner, snap and wax; Bean (*Vigna* spp.), asparagus, Chinese longbean, moth, yardlong, jackbean; Pea (*Pisum* spp.), dwarf, edible-pod, snow, sugar snap, pigeon and sword bean.
- 11 Other Leafy Greens crops approved for use with VOLUNTEER 2EC include: amaranth (Chinese spinach, leafy amaranth and tampala), arugula (rocket), chervil, chrysanthemum (edible-leaved and garland), corn salad, cress (garden, yellow rock and winter), dandelion, dock (sorrel), endive (escarole), lettuce (head and leaf), orach, parsley, purslane (garden and winter), radicchio (red chicory), spinach (New Zealand and Vine (Indian and Malabar)).
- 12 Other cucurbit crops approved for use with VOLUNTEER 2EC include: Chayote (fruit), Chinese Wax Gourd, Citron Melon, Edible Gourd, Gherkin and Muskmelons (all) including Honeydew Melon.
- 13 Other leafy brassica greens approved for use with VOLUNTEER 2EC include: broccoli raab, Chinese (bok choy) cabbage, collards, kale, mizuna, mustard greens, mustard spinach, and rape greens.
- 14 Other leafy petiole crops approved for use with VOLUNTEER 2EC include: cardoon, celtuce, Chinese celery, Florence fennel, and Swiss chard.
- 15 Other tuber and corm vegetables approved for use with VOLUNTEER 2EC include: arracacha, arrowroot, Chinese artichoke, Jerusalem artichoke, edible canna, bitter and sweet cassava, chayote (root), chufa, dasheen (taro), ginger, leren, tanier, turmeric and bean yam.

VOLUNTEER 2EC is not for use on vegetable crops being grown for seed production unless specific use directions are provided.

VOLUNTEER 2EC is a selective postemergence herbicide for control of annual and perennial grasses. VOLUNTEER 2EC does not control sedges or broadleaf weeds.

RESISTANCE MANAGEMENT

VOLUNTEER 2EC Herbicide is a Group 1 Herbicide, i.e., acetyl CoA carboxylase ACCase inhibitor. Any weed population may contain plants naturally resistant to clethodim and other Group 1 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed. Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of actions for each target weed. If level of control provided by applications of this product is reduced and cannot be accounted for by factors such as misapplication, abnormal levels of target species or extremes of weather, it may be the case that target species have developed a strain resistant to applications of VOLUNTEER 2EC Herbicide.

Suspected herbicide-resistant weeds may be identified by these indicators:

- Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- A spreading patch of non-controlled plants of a particular weed species; and
- Surviving plants mixed with controlled individuals of the same species.

To minimize the occurrence of resistant biotypes, observe the following general weed management practices:

- Scout application site before and after herbicide applications.
- Start with a clean application site, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small.
- Add other herbicides (e.g., a selective and/or a residual herbicide) and cultural practices (e.g., tillage or crop rotation) where appropriate.
- Utilize the specified label rate for the most difficult to control weed in your field. Avoid tank mixtures with other herbicides that reduce this product's efficacy (through antagonism), or tank mixture directions that encourage application rates of this product below the label directions.
- Control weed escapes and prevent weeds from setting seeds.
- Clean equipment before moving from field to field to minimize the spread of weed seed or plant parts.
- Report any incidence of repeated non-performance of this product on a particular weed to local extension specialists, certified crop advisors, or your Tenkoz, Inc. representative.

If poor performance occurs and cannot be attributed to adverse weather or application conditions, a resistant biotype may be present. This is most likely to occur in fields where other control strategies such as crop rotation, mechanical removal, and other classes of herbicides are not used from year to year.

Do not allow VOLUNTEER 2EC to come in contact with desirable grass crops such as corn, rice, sorghum, small grains, or turf, as these and other grass crops will be injured or killed. Minor leaf spotting may occur on treated plants under certain environmental conditions. New foliage is not affected.

Control Symptoms

Treated grass weeds show a reduction in vigor and growth. Early chlorosis/necrosis of younger plant tissue is followed by a progressive collapse of the remaining foliage. Symptoms will generally be observed in 7 to 14 days after application, depending on grass species treated and environmental conditions.

APPLICATION INFORMATION

Timing of Applications

Apply VOLUNTEER 2EC postemergence to actively growing grasses, according to rate table directions. Applications made to grass plants stressed by insufficient moisture, or hot or cold temperatures, or to grass plants exceeding listed growth stages may result in unsatisfactory control. Do not apply under these conditions.

In arid regions where irrigation is used to supplement limited rainfall, apply VOLUNTEER 2EC as soon as possible after irrigation (within 7 days). In arid regions, a second application of VOLUNTEER 2EC will generally provide more effective control of perennial grass weeds than a single application. Make second application to actively growing grass 2 to 3 weeks after emergence of new growth.

Cultivation of treated grasses 7 days prior to or within 7 days after application of VOLUNTEER 2EC may reduce weed control. DO NOT APPLY VOLUNTEER 2EC if rainfall is expected within one hour, since control may be reduced.

ADDITION OF ADJUVANT OR CROP OIL CONCENTRATE

CROP	ADJUVANT SPECIFICATIONS
Alfalfa, Cotton, Dry Bean, Shelled Pea, Edible Podded Legume Vegetables, Peanuts (including perennial), Potato, Soybean, Succulent Bean & Pea Shelled, Sugar Beet and Sunflower	Always use a crop oil concentrate* at 1.0 qt./A by ground or 1% v/v (but not less than 1 pt./A) in the finished spray volume by air. 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N or 32%N), or an equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added to VOLUNTEER 2EC applications, in addition to the labeled rate of crop oil concentrate. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.
Artichoke (Globe), Asparagus, Bushberry, Caneberry, Canola, Carrot, Clover, Cranberry, Cucurbits, Flax, Fruiting Vegetables (except Tomato), Garden Beet, Garlic, Head & Stem Brassica Vegetables, Herbs, Hops, Leaf Petioles, Leafy Brassica Greens, Leafy Greens, Mint, Mustard Seed, Onion (Dry Bulb & Green), Peaches, Root Vegetables, Safflower, Sesame, Shallots (Dry Bulb & Green), Strawberry, Sweet Potato (Yam & other Tuberous and Corm Vegetables except Potato) and Tomato	Always use a crop oil concentrate at 1% v/v in the finished spray volume unless tank mix instructions indicate otherwise. Addition of liquid fertilizer is not recommended for these crops.
Non-Bearing Food Crops, Ornamental Plants	Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v). Use of crop oil concentrate is not recommended since it may injure flowers and foliage.
Conifer Trees, Fallow Land (and other non-producing agricultural areas), and Non-Crop or Non-Planted Areas	Always use a crop oil concentrate containing at least 15% emulsifier at 1% v/v (but not less than 1 pt./A) in the finished spray volume.

*Acceptable crop oil concentrates would be those that contain a minimum of 80% oils and 15% emulsifier. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet the following

criteria: be non-phytotoxic, contain only EPA-exempt ingredients, provide good mixing quality, and be successful in local experience. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils.

Ground Application

Use of sufficient spray volumes and pressure is essential to ensure complete coverage. Use a minimum of 5 gals. and a maximum of 40 gals. of spray solution per acre. Under the following conditions a minimum of 10 gals. per acre is required: ultra-narrow row cotton, narrow row soybeans, broadleaf herbicide tank mixes, perennial grasses, volunteer corn, drought or stress conditions, heavy grass pressure or when grasses are at or near maximum height. Failure to use a minimum of 10 gals. per acre under these conditions can result in poor coverage and reduced grass control requiring repeat applications within the rate range. Spray pressures must be a minimum of 30 psi and a maximum of 60 psi at the nozzle. Do not use flood nozzles.

Make applications to onions (dry bulbs and green), garlic, and shallots (dry bulbs and green) in a minimum of 20 gals. of spray solution per acre.

Air Application

Use a minimum of 3 gals. of spray solution per acre unless otherwise directed in this label. Increase spray volumes up to 10 gals. as grass or crop foliage becomes dense. For onions (dry bulbs and green), garlic, or shallots (dry bulbs and green): When applying by air do not exceed 8 fl. oz./A in a single application. In California, make air applications to onions, garlic or shallots in a minimum of 20 gals. of spray solution per acre. In states other than California, make air application to onions, garlic or shallots in a minimum of 10 gals. of spray solution per acre.

Crop injury may occur when VOLUNTEER 2EC is applied to onions, garlic or shallots with aerial equipment.

Spot Treatment

When using hand sprayers or high volume sprayers utilizing hand guns, mix 1/4% to 1/2% (0.33 oz. to 0.65 oz. per gal.) VOLUNTEER 2EC and treat to wet vegetation, while not allowing runoff of spray solution. For uses requiring crop oil concentrate, include crop oil concentrate at 1% (1.3 oz. per gal.) by volume. For uses requiring non-ionic surfactant, include non-ionic surfactant at 1/4% (0.33 oz. per gal.) by volume.

If VOLUNTEER 2EC is applied as a spot treatment, do not exceed the maximum rate allowed on a "per acre" basis or crop injury may occur.

CHEMIGATION – ONION (Dry Bulb and Green) AND GARLIC SPRINKLER IRRIGATION APPLICATION

Do not apply VOLUNTEER 2EC by chemigation in the states of Idaho, Montana, Oregon and Washington.

Apply VOLUNTEER 2EC at the high rate labeled for annual grasses (16 fl. oz. per acre) when the grass height is at the low end of the range (application to larger grasses may not provide adequate control). Add a crop oil concentrate containing at least 15% emulsifier at 1 quart per acre.

Apply VOLUNTEER 2EC in 0.1 to 0.2 acre-inch of water either at the end of a regular irrigation set or as a separate application not associated with a regular irrigation using the least amount of water that provides proper distribution and coverage. Application of more than labeled quantities of irrigation water per acre may result in decreased product performance by removing the chemical from the zone of effectiveness. Use a metering device to inject the VOLUNTEER 2EC into the irrigation water at a constant flow. Constant agitation must be maintained in the chemical supply tank during the entire period of herbicide application. Inject the product with a positive displacement pump into the main line ahead of a right angle

turn to ensure adequate mixing. Allow time for all lines to flush the herbicide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining herbicide, a dye indicator may be injected into the lines to mark the end of the application period.

Do not apply VOLUNTEER 2EC through an irrigation system connected to a public water system. Public water system means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

If you have any questions about calibration, you should contact State Extension Service Specialists, equipment manufacturers or other experts.

Chemigation Restrictions

1. Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, travelers, big gun, solid set, or have move. Do not apply this product through any other type of irrigation system.
2. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the label-prescribed safety devices for public water systems are in place.
3. A person knowledgeable of the chemigation system and responsible for its operations or under supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.
4. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
5. The pesticide injection pipeline must contain a functional, automatic, quick-closing valve to prevent the flow of fluid back toward the injection pump.
6. The pesticide injection pipeline must also contain a functional, normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
7. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
8. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
9. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
10. Do not apply when wind speed favors drift beyond the area intended for treatment.

Chemigation Precautions

1. Crop injury, lack of effectiveness, or pesticide residues in the crop may result from non-uniform distribution of treated water.

RESTRICTIONS

Aerial applications for all tree fruits and tree nuts uses are prohibited.

Do not apply if rain is expected within 1 hour of application as control may be unsatisfactory.

Do not apply postemergence broadleaf herbicide within one day following application of VOLUNTEER 2EC or reduced grass control may result.

Do not apply VOLUNTEER 2EC on vegetable crops being grown for seed production unless specific use directions are provided.

For canola, do not apply more than 6 fl. oz. of VOLUNTEER 2EC per acre per season. For clover, flax, mustard seed and radish crops, do not apply more than 16 fl. oz. of VOLUNTEER 2EC (0.25 lb. ai) per acre per season. For all other crops, do not apply more than 32 fl. oz. VOLUNTEER 2EC (0.50 lb. ai) per acre per season. Application on Long Island, New York, is restricted to no more than 16 fl. oz. of VOLUNTEER 2EC (0.25 lb. ai) per acre per season.

Do not apply more than 8 fl. oz./A of VOLUNTEER 2EC **per application** to the following crops: asparagus, brassica vegetables (head and stem), bean (succulent), carrot, cranberry, cucurbits, flax, fruiting vegetables (except tomato), garden beet, green onion, herbs, hops, leaf petioles, leafy brassica greens, leafy greens, legume vegetables (edible podded), non-bearing food crops, pea (dry shelled), pea (succulent), root vegetables, safflower, sesame and strawberry. Do not apply more than 6 fl. oz./A of VOLUNTEER 2EC per application to canola or mustard seed. For all other crops, do not apply more than 16 fl. oz. of VOLUNTEER 2EC (0.25 lb. ai) per acre per application. **Exceeding these instructions may result in unacceptable crop injury.**

Do not apply under conditions of stress. Applying VOLUNTEER 2EC under conditions that do not promote active grass growth will reduce herbicide effectiveness. These conditions include drought, excessive water, extremes in temperature, low humidity and grasses either partially controlled or stunted from prior pesticide applications. Grasses under these kinds of stressful conditions will not absorb and translocate VOLUNTEER 2EC effectively, and will be less susceptible to herbicide activity.

Optimal perennial grass control can be obtained if rhizomes or stolons are cut up by preplant tillage practices, (discing, plowing, etc.) to stimulate maximum emergence of grass shoots. Cultural practices, such as continuous no-tillage in which the perennial grass rhizomes or stolons are not cut up, result in a very staggered, non-uniform weed emergence. Due to this non-uniform weed emergence, make no fewer than 2 VOLUNTEER 2EC applications per season per year at the appropriate weed-growth stage rate under continuous no-till conditions.

PRECAUTIONS

Grass crops such as corn, rice, sorghum, small grains, or turf, etc. are highly sensitive to VOLUNTEER 2EC.

While all the vegetable crops on this label have been tested and are tolerant to VOLUNTEER 2EC, not all specialty varieties of these crops have been tested. It is advised that, before applying VOLUNTEER 2EC to specialty varieties of vegetable crops on this label, crop tolerance be investigated first using a small section of the field. It is possible that injury symptoms can occur. Symptoms may appear as leaf speckling or stunting.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Tank mixes of VOLUNTEER 2EC and broadleaf herbicides may result in reduced grass control. If grass regrowth occurs, an additional application of VOLUNTEER 2EC may be necessary. **AVOID SPRAY DRIFT.**

SPRAY DRIFT MANAGEMENT

Aerial Applications:

- Do not release spray at a height greater than 10 feet above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use a coarse or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Ground Boom Applications:

- Apply with nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy. For all other ground applications, the nozzle must be no more than 3 feet from the target vegetation.
- Applicators are required to use a medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.

BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume – Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure – Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle – Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

- Adjust Nozzles – Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT – Ground Boom

For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT – Aircraft

Higher release heights increase the potential for spray drift.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

CROP SPECIFIC USE DIRECTIONS FOR VOLUNTEER 2EC

Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
Alfalfa including: Sainfoin Holy Clover Birdsfoot trefoil ³	15 days before grazing, feeding or harvesting (cutting for forage or hay)	6-16 fl oz ⁴	1 qt by ground or 1% v/v (but not less than 1 pt./A) by air ⁵	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Refer to tank mix partners for feeding, grazing and harvesting restrictions. ^{5,6} The addition of AMS has shown improved grass control for

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
					difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.
Artichoke (Globe)	5 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum number of applications is 4 Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval. Do not apply more than 32 fl. oz./A (0.5 lb. ai/A) per season.
Asparagus	1 day	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Bean, Dry including: Bean (<i>Lupinus</i> spp.) Grain Sweet White White Sweet Bean (<i>Phaseolus</i> spp.) Field Kidney Lima (dry) Navy	30 days	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁵	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not apply more than 16 fl. oz./A per application. For repeat applications make on a minimum of a 14 day interval.

Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
Pinto Tepary Bean (<i>Vigna</i> spp.) Adzuki Bean Black-eyed Pea Catjang Cowpea Crowder Pea Moth Bean Mung Bean Rice Bean Southern Pea Urd Bean Broad (dry) Chickpea (garbanzo) Guar Lablab Bean Lentil					Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.
Bean, Succulent Shelled including: Bean (<i>Phaseolus</i> spp.) Broad Bean (succulent) Lima Bean (green) Bean (<i>Vigna</i> spp.) Black-eyed Pea Cowpea Southern Pea	21 days	6-8 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁵		Refer to appropriate Table for reduced rate directions for the control of small annual grasses. Do not apply more than one 1 application per acre per season. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass,

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
					rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.
Beet, Garden	30 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Brassica Vegetables, Head & Stem including: Broccoli Brussels sprouts Cabbage Cauliflower	30 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Bushberry , including: Aronia berry Blueberry, highbush Chilean guava Cranberry, highbush Currant, Black Currant, Buffalo Currant, native Currant, Red Elderberry European Barberry Gooseberry Honeysuckle, edible Huckleberry Jostaberry Juneberry Saskatoon berry Salal Sea Buckthorn Cultivars, varieties	14 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. Do not apply more than 32 fl. oz. (0.5 lb. ai/A) per season. For repeat applications make a minimum of a 14 day interval. Apply at the base of the plant where

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
and/or hybrids of these					<p>grassy weeds are growing near the ground.</p> <p>Do not apply to low growing berries.</p> <p>Do not apply to Bushberry grown for root stock.</p>
Caneberry , including: Blackberry Loganberry Raspberry, black Raspberry, red Raspberry, wild Cultivars, varieties and/or hybrids of these	7 days	6-8 fl. oz.	1% v/v in the finished spray volume.	<p>Maximum annual application rate is 1.04 lbs. a.i./A</p> <p>Maximum number of applications is 4</p>	<p>Do not apply more than 8 fl. oz./A in a single application.</p> <p>Do not apply more than 32 fl. oz./A (0.5 lb. ai/A) per season.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Apply at the base of the plant where grassy weeds are growing near the ground.</p> <p>Do not apply to low growing berries.</p> <p>Do not apply to Caneberry grown for root stock.</p>

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
Canola (not registered for use in California)	70 days	4-6 fl. oz.	1% v/v in the finished spray volume.		Do not apply after crop has begun bolting. Crop injury may occur when VOLUNTEER 2EC is applied during the bloom period. Do not apply more than 6 fl. oz./A in a single application. Do not exceed 6 fl. oz./A in a season.
Carrot	30 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Clover	15 days before grazing, feeding or harvesting (cutting) for forage or hay	6-16 fl. oz.	1% v/v in the finished spray volume.	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	For use on clover grown in the states of Idaho, Oregon and Washington only. Do not exceed 16 fl. oz./A in a season.
Corn, Field For burndown of existing stand of Roundup Ready field corn or volunteer Roundup Ready field corn prior to replanting	90 days	3 fl. oz.	Do not use COC or MSO with VOLUNTEER 2EC in this		Do not make more than 1 application per season. Do not apply more than 3 fl.

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
field corn. See Directions for Use in Roundup Ready Field Corn (Burndown) table.			use pattern.		oz./A per season. To control the existing stand, replant no sooner than 6 days after application.
Cotton	60 days	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁵	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not graze on treated fields or feed treated forage or hay to livestock. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.
Cranberry	30 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. Do not apply between the "hook" stage and full fruit set. For repeat applications make on a minimum of a 14 day interval.

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
Cucurbits including: Chayote (fruit) Chinese Wax Gourd Citron Melon Cucumber Gherkin Gourd, Edible Muskmelons (all) including: Cantaloupes Honeydew Melon Pumpkin Squash (all) Watermelon	14 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Fallow Land Conifer Trees (and other non-producing agricultural areas) Non-Crop or Non-Planted Areas	N/A	6-16 fl. oz.	1% v/v (but not less than 1 pt./A) in the finished spray volume using a crop oil concentrate containing at least 15% emulsifier.	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not plant any crop for 30 days after application unless clethodim is registered for use in that crop.
Flax (not registered for use in California)	60 days	6-8 fl. oz.	1% v/v in the finished spray volume		Apply prior to bloom. Crop injury may occur when VOLUNTEER 2EC is applied during the bloom period. Do not apply more than 8 fl. oz./A in a single application. Do not exceed 16 fl. oz./A in a season.

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
Fruiting Vegetable (except tomato) including: Eggplant Groundcherry Pepino Peppers (all) Tomatillo	20 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum annual application rate is 1.04 lbs. a.i./A	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Herbs including: Angelica Balm Basil Borage Burnet Camomile Catnip Chervil (dried) Chive Chive, Chinese Clary Coriander (leaf) Costmary Culantro (leaf) Curry (leaf) Dill (dillweed) Horehound Hyssop Lavender Lovage (leaf) Marigold Marjoram (<i>Origanum</i> spp.) Nasturtium Parsley (dried) Pennyroyal Rosemary Rue Sage Savory, Summer and Winter	14 days	6-8 fl. oz.	1% v/v in the finished spray volume	Maximum number of applications is 4	VOLUNTEER 2EC has not been tested on all herbs, and herb varieties. It is the responsibility of the user to test VOLUNTEER 2EC on a small portion of the crop to be treated before treating the entire field. Crop tolerance should be verified to VOLUNTEER 2EC on a small area of the herb crop, at the desired VOLUNTEER 2EC rate and with the same crop oil concentrate that will be used on the herb field. If no crop response is evident seven 7 days after treatment, VOLUNTEER

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
					<p>2EC may be used on the entire field at the rate tested and with the same crop oil used in the tolerance test.</p> <p>Do not apply more than 8 fl. oz./A in a single application.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p>
Hops	21 days	6-8 fl. oz.	1% v/v in the finished spray volume	Maximum number of applications is 4	<p>Do not apply more than 8 fl. oz./A in a single application.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p>
Leaf Petioles including: Cardoon Celery Celtuce Chinese Celery Fennel, Florence (finocchio) Rhubarb Swiss Chard	30 days	6-8 fl. oz.	1% v/v in the finished spray volume		<p>Do not apply more than 8 fl. oz./A in a single application.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p>
Leafy Brassica Greens including: Broccoli Raab Cabbage, Chinese (bok choy) Collards Kale	14 days	6-8 fl. oz.	1% v/v in the finished spray volume	Maximum annual application rate is 1.04 lbs. a.i./A Maximum	<p>Do not apply more than 8 fl. oz./A in a single application.</p> <p>For repeat</p>

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
Mizuna Mustard Greens Mustard Spinach Rape Greens				number of applications is 4	applications make on a minimum of a 14 day interval.
Leafy Greens including: Amaranth Chinese Spinach Leafy Amaranth Tampala Arugula (roquette) Chervil Chrysanthemum, Edible-leaved Chrysanthemum, Garland Corn Salad Cress, Garden Upland (yellow rock and winter) Dandelion Dock (sorrel) Endive (escarole) Lettuce, Head and Leaf Orach Parsley Purslane Garden Winter Radicchio (red chicory) Spinach New Zealand Vine (Indian & Malabar)	14 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Legume Vegetables, Edible Podded including: Bean (<i>Phaseolus</i> spp.) Runner Snap Wax Bean (<i>Vigna</i> spp.) Asparagus Chinese Longbean Moth Yardlong Jackbean Pea (<i>Pisum</i> spp.)	21 days	6-8 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁵		Do not apply more than 8 fl. oz./A in a single application. Do not apply more than one 1 application per acre per season. For peas apply before bloom,

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
Dwarf Edible-pod Snow Sugar Snap Pigeon Sword Bean					but no later than 21 days before harvest. Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult to control grasses including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals, and volunteer corn.
Mint	21 days	6-16 fl. oz. ⁴	1 qt. by ground or 1% v/v (but not less than 1 pt./A by air).	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not apply more than 16 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Mustard Seed (not registered for use in California)	75 days	4-6 fl. oz.	1% v/v in the finished spray volume.		Do not apply after crop has begun bolting. Crop injury may occur when VOLUNTEER 2EC is applied during the bloom period.

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Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
					Do not apply more than 6 fl. oz./A in a single application. Do not exceed 16 fl. oz./A in a season.
Onion (Dry Bulb Only) Garlic Shallot (Dry Bulb Only)	45 days	6-16 fl. oz. ^{7,8}	1% v/v in the finished spray volume.	Maximum number of applications is 4	Minimum of 20 gals./A spray volume by ground in entire U.S. Minimum of 20 gals./A spray volume by air in California. ⁹ In states other than California, make air applications to onions, garlic or shallots in a minimum of 10 gals./A.
Onion, Green including: Green Eschalot Green Shallot Japanese Bunching Onion Leeks Scallion or Spring Onion	14 days	6-8 fl. oz.	1% v/v in the finished spray volume		Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Ornamentals	N/A	6-16 fl. oz.	Use of crop oil concentrate is not recommended since it may		Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals.
Non-Bearing Food Crops	N/A	6-8 fl. oz. ⁸		Maximum annual application rate is 1.04 lbs. a.i./A	

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops ¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre ²	Use Restrictions	Special Use Instructions
			injure flowers and foliage. See Special Use Instructions.	Maximum number of applications is 4	(0.25% v/v). Sugar maples cannot be tapped for syrup within one year of VOLUNTEER 2EC application. Do not apply more than 8 fl. oz./A in a single application to non-bearing food crops.
Pea, Shelled including: Pea (<i>Pisum</i> spp.) Field Pigeon	30 days	6-8 fl. oz.	1 qt. by ground or 1% v/v (but no less than 1 pt./A) by air. ⁵		Do not apply more than 8 fl. oz./A per application. Do not apply more than one 1 application per acre per season. Apply before bloom but not later than 30 days prior to harvest. ¹⁰ Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
					control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.
Pea, Succulent Shelled including: Pea (<i>Pisum</i> spp.) English Pea Garden Pea Green Pea Pigeon Pea	21 days	6-8 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁵		Do not apply more than 8 fl. oz./A per application. Do not apply more than one 1 application per acre per season. Apply before bloom but no later than 21 days prior to harvest. ¹⁰ Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass,

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
					red rice, wild oats, volunteer cereals and volunteer corn.
Peach	14 days	6-8 fl. oz.	1% v/v in the finished spray volume.	<p>Maximum annual application rate is 1.04 lbs. a.i./A</p> <p>Maximum number of applications is 4</p>	<p>Do not apply more than 8 fl. oz./A in a single application.</p> <p>Do not apply more than 32 fl. oz./A (0.5 lb. ai/A) per season.</p> <p>For repeat applications make on a minimum of a 14 day interval.</p> <p>Do not apply to Peach grown for root stock.</p>
Peanut (including Perennial)	40 days	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁵	<p>Maximum annual application rate is 1.04 lbs. a.i./A</p> <p>Maximum number of applications is 4</p>	The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.
Potato	30 days	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁵	<p>Maximum annual application rate is 1.04 lbs. a.i./A</p> <p>Maximum number of</p>	The addition of AMS has shown improved grass control for difficult to control species including:

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
				applications is 4	quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.
Radish	15 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. Do not apply more than 16 fl. oz./A (0.25 lb. ai) per acre in a season. For repeat applications make on a minimum of a 14 day interval.
Root Vegetables (except Radish), including: Chicory Ginseng Horseradish Turnip	30 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Safflower	70 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Sesame	14 days	6-8 fl. oz.	1% v/v in the	Maximum number of	Do not apply during

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
			finished spray volume.	applications is 4	flowering. Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.
Soybean	60 days	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁵	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Do not graze treated fields or feed treated forage or hay to livestock. Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.
Strawberry	4 days	6-8 fl. oz.	1% v/v in the finished spray volume	Maximum annual application rate is 1.04 lbs. a.i./A	Do not apply more than 8 fl. oz./A in a single application.

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
				Maximum number of applications is 4	For repeat applications make on a minimum of a 14 day interval.
Sugar Beet	40 days	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁵	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	Refer to appropriate Table for reduced rate directions for the control of small annual grasses. The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.
Sunflower	70 days	6-16 fl. oz.	1 qt. by ground or 1% v/v (but not less than 1 pt./A) by air. ⁵	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	The addition of AMS has shown improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.
Sweet Potato, Yam and other Tuberous and Corm Vegetables	30 days	6-16 fl. oz.	1% v/v in the finished	Maximum annual application	The addition of AMS has shown

Table A: VOLUNTEER 2EC Crop Specific Use Directions					
Crops¹	Minimum Time From Application To Harvest (PHI)	Use Rates Per Acre	Crop Oil Concentrate Rates Per Acre²	Use Restrictions	Special Use Instructions
(except Potato) including: Artichoke Chinese Jerusalem Cassava Bitter Sweet Ginger			spray volume	rate is 1.04 lbs. a.i./A Maximum number of applications is 4	improved grass control for difficult to control species including: quackgrass, rhizome Johnsongrass, red rice, wild oats, volunteer cereals and volunteer corn.
Tomato	20 days	6-16 fl. oz.	1% v/v in the finished spray volume	Maximum annual application rate is 1.04 lbs. a.i./A Maximum number of applications is 4	For repeat applications make on a minimum of a 14 day interval.
Turnip Greens	14 days	6-8 fl. oz.	1% v/v in the finished spray volume.	Maximum number of applications is 4	Do not apply more than 8 fl. oz./A in a single application. For repeat applications make on a minimum of a 14 day interval.

N/A = Not Applicable

¹ Do not apply VOLUNTEER 2EC on vegetable crops being grown for seed production unless specific use directions are provided.

² Acceptable crop oil concentrates would be those which contain a minimum of 80% oils and 15% emulsifier. A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all the following criteria: be non- phytotoxic, contain only EPA-exempt ingredients, provide good mixing quality and be successful in local experience. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. See the Addition of Adjuvant and Crop Oil Concentrate section for further information.

³ VOLUNTEER 2EC may be applied to seedling or established alfalfa grown for seed, hay, silage, green chop or direct grazing.

⁴ For weed control in established alfalfa and mint, the minimum use rate is 10 fl. oz./A.

- ⁵ 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N or 32%N), or an equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added to VOLUNTEER 2EC applications, in addition to the labeled rate of crop oil concentrate.
- ⁶ Do not apply VOLUNTEER 2EC plus 2,4-DB as a tank mix to alfalfa unless the 60 day feeding, grazing, and harvesting restricting on the 2,4-DB label can be observed.
- ⁷ For ground applications to garlic or shallot, do not exceed 8 fl. oz./A in a single application. For air applications to onion, garlic or shallot, do not exceed 8 fl. oz./A in a single application. For garlic and shallot, do not exceed 2 applications per season. In CA for air applications to onion, do not exceed 2 applications per season.
- ⁸ If VOLUNTEER 2EC is applied as a spot treatment to onion, garlic, shallot, or non-bearing food crops, do not exceed the maximum rate allowed on a “per acre” basis or crop injury may occur.
- ⁹ In California, do not apply VOLUNTEER 2EC to onion, garlic, or shallot until the crop has at least two full leaves. In California 14 day spray intervals are recommended between the application of VOLUNTEER 2EC and liquid nitrogen or other herbicide applications. Injury to crop may occur when shorter intervals are observed.
- ¹⁰ Applications of VOLUNTEER 2EC to peas during the bloom period could result in severe crop injury, including loss of yield and delayed maturity.

IMPORTANT

Plant tolerance to VOLUNTEER 2EC at labeled rates has been found to be acceptable for the indicated genera and species listed below. Due to variability within species, crop growth stage, environmental conditions, and application techniques, it is recommended that the user determine if the herbicide can be used safely of a few plants prior to widespread application. Neither the seller nor the manufacturer of VOLUNTEER 2EC have investigated the safety factor to plants not listed on the label.

NON-BEARING FOOD CROPS

Aerial applications for all tree fruit and tree nuts are prohibited.

DO NOT APPLY VOLUNTEER 2EC TO NON-BEARING FRUIT OR NUT CROPS WHICH ARE GROWN FOR ROOT STOCK.

Crop injury to non-bearing fruit and nut crops can occur if VOLUNTEER 2EC is improperly applied. Do not apply VOLUNTEER 2EC directly over the top of these plant types. Instead, direct spray at the base of the plant where grassy weeds are growing near the ground.

Non-bearing fruit and nut crops are plants which will not bear fruit or nuts for at least one year following VOLUNTEER 2EC application.

Table B: Non-Bearing Fruit and Nut Crop Species	
COMMON NAME	SCIENTIFIC NAME
Apples	<i>Malus</i> spp.
Berries	<i>Vaccinium</i> spp. <i>Rubus</i> spp.
Cherry, Sweet	<i>Prunus avium</i>
Citrus Fruits	<i>Citrus</i> spp.

Table B: Non-Bearing Fruit and Nut Crop Species	
COMMON NAME	SCIENTIFIC NAME
Grapes	<i>Vitis</i> spp.
Olives	<i>Olea</i> spp.
Peach	<i>Prunus persica</i>
Pears	<i>Pyrus communis</i>
Prunes	<i>Prunus</i> spp.
Stone Fruits	<i>Prunus</i> spp.
Strawberries	<i>Fragaria</i> spp.
Tree Nuts	
Almonds	<i>Prunus triloba</i>
Filbert	<i>Corylus maxima</i>
Pecan	<i>Carya illinoensis</i>
Pistachio	<i>Pistacia vera</i>
Walnut	<i>Jugians</i> spp.

CONIFER TREES

VOLUNTEER 2EC can be used to control labeled grasses in Christmas tree farms, conifer nurseries, and conifer plantations (but not in forests).

Table C: Conifer Species	
COMMON NAME	SCIENTIFIC NAME
Arborvitae, American	<i>Thuja occidentalis</i>
Cedars	<i>Cedrus</i> spp.
Cypress	<i>Taxodium</i> spp.
Fir, Douglas	<i>Pseudotsuga menziesii</i>
Firs	<i>Abies</i> spp.
Hemlock, Canadian/Eastern	<i>Tsuga Canadensis</i>
Hemlock, Western	<i>Tsuga heterophylla</i>
Pines	<i>Pinus</i> spp.
Spruces	<i>Picea</i> spp.
Yew	<i>Taxus</i> spp.

NON-CROP OR NON-PLANTED AREAS

The following areas are considered non-crop or non-planted areas: rights-of-way including railroads, highways, roads, dividers, medians, pipelines, public utility lines, pumping stations, transformer stations and substations. Around airports, electric utilities, commercial buildings, manufacturing plants, storage yards, rail yards, fence lines, parkways, and post-harvest crop-lands. Also beneath greenhouse benches and around golf courses.

DIRECTIONS FOR ANNUAL GRASSES (EXCEPT FOR IN ESTABLISHED ALFALFA AND MINT)

- Apply only to actively growing grasses at listed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the listed growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.
- Do not apply more than 8 fl. oz./A of VOLUNTEER 2EC **per application** to the following crops: asparagus, carrot, cranberry, cucurbits, flax, fruiting vegetables (except tomato), garden beets, green

onion, head and stem brassica vegetables, herbs, hops, leaf petioles, leafy brassica greens, leafy greens, non-bearing food crops, root vegetables, safflower, sesame and strawberry. Do not apply more than 6 fl. oz./A of VOLUNTEER 2EC per application to canola or mustard seed.

Table D: Directions for Use of VOLUNTEER 2EC on Grasses⁵

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* (INCHES)	RATE FL. OZ./ACRE	HIGH RATE ¹
Barnyardgrass	<i>Echinochloa crus-galli</i>	2 to 8	6	8
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	2 to 6	6	8
Brome				
California	<i>Bromus carinatus</i>	2 to 6	6	8
Cheat	<i>Bromus secalinus</i>	2 to 6	6	8
Downy	<i>Bromus tectorum</i>	2 to 6	6	8
Ripgut	<i>Bromus diandrus</i>	2 to 6	6	8
Canarygrass	<i>Phalaris canariensis</i>	1 to 4	6	8
Crabgrass				
Hairy	<i>Digitaria adscendens</i>	2 to 6**	6	8
Large	<i>Digitaria sanguinalis</i>	2 to 6**	6	8
Smooth	<i>Digitaria ischaemum</i>	2 to 6**	6	8
Southern	<i>Digitaria ciliaris</i>	2 to 6**	6	8
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	2 to 6**	6	8
Fall Panicum	<i>Panicum dichotomiflorum</i>	2 to 8	6	8
Field Sandbur	<i>Cenchrus incertus</i>	2 to 6	6	8
Foxtail				
Giant	<i>Setaria faberi</i>	2 to 12	6	8
Green	<i>Setaria viridis</i>	2 to 8	6	8
Yellow	<i>Setaria glauca</i>	2 to 8	6	8
Goosegrass	<i>Eleusine indica</i>	2 to 6**	6	8
Itchgrass	<i>Rottboellia cochinchinensis</i>	2 to 6	6	8
Junglerice	<i>Echinochloa colona</i>	2 to 6	6	8
Lovegrass (Stinkgrass)	<i>Eragrostis cilianensis</i>	2 to 6	6	8
Rabbitsfootgrass	<i>Polypogon monspeliensis</i>	1 to 4	6	8
Red Rice	<i>Oryza sativa</i>	1 to 3	6	8
Ryegrass				
Hardy	<i>Lolium remotum</i>	2 to 6	6	8
Italian	<i>Lolium multiflorum</i>	2 to 6	6	8
Seedling Johnsongrass	<i>Sorghum halepense</i>	4 to 10	6	8
Shattercane	<i>Sorghum bicolor</i>	6 to 18	6	8
Southwestern Cupgrass	<i>Eriochloa gracilis</i>	2 to 6	6	8
Sprangle Top				
Amazon	<i>Leptochloa panicoides</i>	2 to 6	6	8
Bearded	<i>Leptochloa fascicularis</i>	2 to 6	6	8
Mexican	<i>Leptochloa uninervia</i>	2 to 6	6	8
Red	<i>Leptochloa filiformis</i>	2 to 6	6	8
Texas Panicum	<i>Panicum texanum</i>	2 to 6	6	8
Volunteer Cereals ²				
Barley	<i>Hordeum vulgare</i>	2 to 6	6	8
Oats	<i>Avena sativa</i>	2 to 6	6	8
Rye	<i>Secale cereale</i>	2 to 6	6	8
Wheat	<i>Triticum aestivum</i>	2 to 6	6	8

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* (INCHES)	RATE FL. OZ./ACRE	HIGH RATE ¹
Volunteer Corn ³	<i>Zea mays</i>	4 to 12	4	8
Volunteer Corn ³	<i>Zea mays</i>	12 to 24	6	8
Volunteer Corn (S.R.) ⁴	<i>Zea mays</i>	4 to 12	8 (suppression only)	
Volunteer Grain Sorghum	<i>Sorghum bicolor</i>	8 to 12	6	8
Wild Oats	<i>Avena fatua</i>	2 to 6	6	8
Wild Proso Millet	<i>Panicum miliaceum</i>	2 to 10	6	8
Witchgrass	<i>Panicum capillare</i>	2 to 8	6	8
Woolly Cupgrass	<i>Eriochloa villosa</i>	2 to 8	6	8

* Generally occurs between 3-leaf stage and tillering.

**Length of lateral growth.

¹Rates higher than 8 fl.oz./A may be applied in certain geographic areas, cropping situations, or environmental conditions, where experience has shown that higher rates are needed for satisfactory control of annual grasses. In these situations, rates from 8 to 16 fl. oz./A may be applied. Do not apply more than 8 fl.oz./A of VOLUNTEER 2EC per application to the following crops: asparagus, carrot, cranberry, cucurbits, flax, fruiting vegetables (except tomato), garden beet, green onion, head and stem brassica vegetables, herbs, hops, leaf petioles, leafy brassica greens, leafy greens, non-bearing food crops, root vegetables, safflower, sesame and strawberry.

Do not apply more than 6 fl. oz./A of VOLUNTEER 2EC per application to canola or mustard seed.

²When a cereal grain crop (such as wheat) is interseeded for crop establishment or is planted as wind breaks to aid in crop establishment, the minimum VOLUNTEER 2EC use rate for control is 8 fl. oz./A.

³Includes Roundup Ready®, Liberty Link®, and IMI-CORN® volunteer corn.

⁴Sethoxydim resistant volunteer corn.

⁵See Table E for use rates in established alfalfa and mint.

GRASS SPECIES	WEED STAGE	RATE FL. OZ./ACRE	HIGH RATE
Annual & Perennial Grasses Listed in Grass Table	See Table D	10	16
<p>Mowing: The best control of annual grasses can be achieved by applying VOLUNTEER 2EC before grass weeds are mowed. Once a grass is mowed it becomes tougher to control, as much of the available leaf surface has been removed. In areas without a killing frost, some annuals can over-winter after having been mowed multiple times. These grasses form large crowns and may contain many viable buds. These grasses, even though they may be an annual grass, may require repeated applications of VOLUNTEER 2EC for partial or complete control within the rate range.</p> <p>Irrigated Alfalfa and Mint: Irrigation practices can be very critical to the successful use of VOLUNTEER 2EC in established alfalfa and mint and may be necessary to initiate active growth of the weeds prior to application. Generally applications 2 to 4 days after an irrigation are most effective. Irrigation made shortly after application (2 days) can be effective, but more consistent grass control occurs when the irrigation is made before the application.</p> <p>Aerial Application: Apply VOLUNTEER 2EC in a minimum of 10 GPA in established alfalfa and mint when applying by air.</p> <p>Annual Grass Control: Apply VOLUNTEER 2EC at the grass sizes indicated in the Directions for Annual Grass Table and rates indicated. If a grass has been cut, apply VOLUNTEER 2EC after active growth has resumed and regrowth has reached the minimum height and before it reached the maximum height indicated. Apply before the alfalfa/mint canopy covers the grasses and interferes with the spray coverage. Some annual grasses are spring- and summer-germinating plants, while others are fall-</p>			

germinating plants, and the time they are actively growing and most susceptible to VOLUNTEER 2EC may vary from region to region. Also some annuals germinate over an extended period of time, and because control of small grasses is desired, applications after each weed flush may be required. As a general rule spray spring and summer-germinating grasses as early in the season as possible, after initial green-up. Spray fall-germinating weeds in the fall soon after they begin growing but before any damage is done due to frost. Late fall applications may be less effective due to environmental conditions, such as frost, slower plant growth, or the onset of flowering.

Perennial Grass Control: VOLUNTEER 2EC effectively controls perennial grasses such as bermudagrass, Johnsongrass, quackgrass, wirestem muhly, tall fescue, foxtail barley and orchardgrass. Due in part to lack of tillage, perennial grasses are more difficult to control in a perennial crop such as established alfalfa or mint. A program of repeated applications within the rate range is usually necessary for best results. The best way to control perennial grasses is to do so in the year of stand establishment before rhizomes and stolons become large and difficult to kill.

Use the high rate under heavy grass pressure and/or when grasses are at or near maximum height. Always add a crop oil concentrate at 1 qt./A by ground or 1% v/v (but not less than 1 pt./A) to the finished spray volume by air.

Table F: DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL WITH VOLUNTEER 2EC

GRASS SPECIES	WEED STAGE	RATE FL. OZ./ACRE	HIGH RATE
Annual Bluegrass (<i>Poa annua</i>)	To 4-leaf	6*	16

Apply under favorable soil moisture and humidity, which exists within a few days after rainfall or within 7 days after irrigation. Grass needs to be actively growing at time of application(s).

Apply at weed stage indicated on the label, as reduced control can be expected with more mature annual bluegrass.

Use the high rate under heavy grass pressure and/or when annual bluegrass is more mature.

Always add a crop oil concentrate at 1 qt./A by ground to the finished spray volume.

*Use a minimum of 10 fl. oz./A to control annual bluegrass in seedling and established alfalfa and mint.

Table G: Directions for Use in Glyphosate Tolerant Field Corn (Burndown)

GRASS SPECIES	WEED SIZE (inches)	RATE WHEN APPLIED ALONE OR WITH GLYPHOSATE
Field Corn	Up to 12	3 fl. oz./A

For control or existing stand of glyphosate tolerant field corn or volunteer glyphosate tolerant field corn prior to replanting field corn.

Care must be taken to avoid in-field boom (spray) overlaps or excessive crop injury may occur.

Replant no sooner than 6 days after application.

Adjuvant rates: NIS at 0.25% v/v plus AMS at 2.5 to 4 lbs./A.

Do not use a COC or MSO with VOLUNTEER 2EC in this use pattern.

**DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES
IN CANOLA, DRY SHELLED BEAN & PEA (INCLUDING SOYBEAN), EDIBLE PODDED LEGUME
VEGETABLES, FLAX, MUSTARD SEED, SUCCULENT BEAN & PEA AND SUGAR BEET
(REDUCED RATE DIRECTIONS NOT FOR USE IN CALIFORNIA)**

- Apply only to actively growing grasses at listed weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the labeled growth stage for treatment.
- Regrowth by tillering may occur if application is made when plants are stressed by lack of moisture, excessive moisture, low or high temperatures, and/or under very low humidity.

Table H: VOLUNTEER 2EC Reduced Rates to Control Small Annual Grasses in Canola, Dry Shelled Bean & Pea (Including Soybean), Edible Poddled Legume Vegetables, Flax, Mustard Seed, Succulent Bean & Pea and Sugar Beet²

GRASS SPECIES	SCIENTIFIC NAME	WEED HEIGHT* (INCHES)	RATE FL. OZ./ACRE ^{1,2,3}
Barnyardgrass	<i>Echinochloa crus-galli</i>	1 to 4	4
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	1 to 4	5
Crabgrass			
Large	<i>Digitaria sanguinalis</i>	1 to 3*	4
Large	<i>Digitaria sanguinalis</i>	1 to 4*	5
Smooth	<i>Digitaria ischaemum</i>	1 to 3*	4
Smooth	<i>Digitaria ischaemum</i>	1 to 4*	5
Southern	<i>Digitaria ciliaris</i>	1 to 4*	5
Fall Panicum	<i>Panicum dichotomiflorum</i>	1 to 4	4
Foxtail			
Giant	<i>Setaria faberi</i>	1 to 4	4
Green	<i>Setaria viridis</i>	1 to 4	4
Millet	<i>Setaria italica</i>	1 to 4	5
Yellow	<i>Setaria glauca</i>	1 to 4	4
Seedling Johnsongrass	<i>Sorghum halepense</i>	1 to 6	5
Shattercane	<i>Sorghum bicolor</i>	4 to 10	4
Texas Panicum	<i>Panicum texanum</i>	1 to 4	5
Volunteer Cereals			
Barley	<i>Hordeum vulgare</i>	1 to 4	5
Oats	<i>Avena sativa</i>	1 to 4	5
Wheat	<i>Triticum aestivum</i>	1 to 4	5
Volunteer Corn **	<i>Zea mays</i>	4 to 12	4
Wild Proso Millet	<i>Panicum miliaceum</i>	1 to 6	4
Wild Oats	<i>Avena fatua</i>	1 to 4	5

* Length of lateral growth

** Not S.R. Corn

¹ Always add a crop oil concentrate at 1 qt./A by ground application to the finished spray volume.

² Reduced rate directions not for use in California

³ See Table A for restrictions on maximum annual application rate and maximum number of applications per year for specific crops.

DIRECTIONS FOR PERENNIAL GRASSES

- Apply only to actively growing grasses at listed weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the labeled growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at maximum height.

- Do not apply more than 8 fl. oz./A of VOLUNTEER 2EC per application to the following crops: asparagus, carrot, cranberry, cucurbits, flax, fruiting vegetables (except tomato), garden beet, green onion, head and stem brassica vegetables, herbs, hops, leaf petioles, leafy brassica greens, leafy greens, non-bearing food crops, root vegetables, safflower, sesame and strawberry. Do not apply more than 6 fl. oz./A of VOLUNTEER 2EC per application to canola or mustard seed.

Table I: VOLUNTEER 2EC Rates for Perennial Grasses¹

GRASS SPECIES	WEED HEIGHT (inches)	RATE FL. OZ./ ACRE ¹	HIGH RATE ¹
Bermudagrass (<i>Cynodon dactylon</i>)			
First Application	3 (or up to 6" runners)	8	16
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	8	16
Fescue, Tall (<i>Festuca arundinacea</i>)			
First Application	4 to 8	8	16
Repeat Application(s) (if regrowth occurs)	4 to 8	8	16
Foxtail Barley (<i>Hordeum jubatum</i>)			
First Application	2 to 6	8	16
Repeat Application(s) (if regrowth occurs)	2 to 6	8	16
Orchardgrass (<i>Dactylis glomerata</i>)			
First Application	4 to 8	8	16
Repeat Application(s) (if regrowth occurs)	4 to 8	8	16
Quackgrass* (<i>Elytrigia repense</i>)			
First Application	4 to 12	8	16
Repeat Application(s) (if regrowth occurs)	4 to 12	8	16
Rhizome Johnsongrass (<i>Sorghum halepense</i>)			
First Application	12 to 24	8	16
Repeat Application(s) (if regrowth occurs)	6 to 18	6	8
Wirestem Muhly (<i>Muhlenbergia frondosa</i>)			
First Application	4 to 8	8	16
Repeat Application(s) (if regrowth occurs)	4 to 8	8	16
Perennial Bluegrass*			
Roughstalk (<i>Poa trivialis</i>)			
Kentucky (<i>Poa pratensis</i>)			
First Application	2 to 4	8	16
Repeat Application(s) (if regrowth occurs)	2 to 4	8	16
Bentgrass* (<i>Agrostis</i> spp.)			
First Application	2 to 4	-	16
Repeat Application(s) (if regrowth occurs)	2 to 4	-	16

*Control of quackgrass, perennial bluegrass and bentgrass with VOLUNTEER 2EC may be enhanced by adding AMS at 2.5 to 4.0 lbs./A.

¹ See Table A for restrictions on maximum annual application rate and maximum number of applications per year for specific crops

TANK MIXES PRODUCT INFORMATION

The labels for each of the herbicides recommended for tank mixing with VOLUNTEER 2EC are unique to the characteristics of those products and contain restrictions and limitations that may be more restrictive than the VOLUNTEER 2EC label in certain considerations. Those concerns may include, but are not limited to:

1. Geographic restrictions – all products are not registered for use in all areas and rates may vary from one region of labeled use to another;
2. Crop rotation restrictions;
3. Applicator certification requirements;
4. Worker safety rules (e.g., protective clothing, reentry time, posting);
5. Soil type or soil characteristics (e.g., pH, OM);
6. Maximum dosage or number of applications per season;
7. Rain free period required; or
8. Application timing (e.g., pre-harvest interval)
9. Do not exceed the total season rates.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

TANK MIX APPLICATION OF VOLUNTEER 2EC AND BROADLEAF HERBICIDES FOR CONTROL OF GRASSES AND BROADLEAF WEEDS

- Apply only to actively growing grass and broadleaf weeds at labeled height or growth stage listed on each label.
- Apply when the first grass or broadleaf weed species in a mixed population reaches the labeled height or growth stage for treatment.
- Apply under favorable soil moisture and humidity that exist a few days after rainfall or within seven days after irrigation.
- Always add the appropriate adjuvant to the spray mix at the rate specified for each specific tank mix combination.
- Tank mix applications may sometimes result in reduced grass control and possible increases in crop injury as compared to either product used alone. If regrowth occurs, or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC, as specified in the respective size and rate tables.
- Do not tank mix VOLUNTEER 2EC when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.

MIXING INSTRUCTIONS

1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
2. While agitating, add the correct amount of VOLUNTEER 2EC. Agitation should create a rippling or rolling action on the water surface.
3. If tank mixing VOLUNTEER 2EC with other labeled herbicides, add water soluble bags first, followed by dry formulations, flowables, emulsifiable concentrates, and then solutions. Prepare no more spray mixture than is required for the immediate spray operation.
4. Add any required adjuvants (crop oil concentrate, non-ionic surfactant and/or nitrogen solution).
5. Fill spray tank to desired level with water. **Agitation should continue until all spray solution has been applied.**

Failure to agitate the spray solution may result in improper mixing of the herbicides and unsatisfactory weed control. Mixing and compatibility qualities should be verified by a jar test.

INFORMATION ON ANTAGONISM

Tank mixes of VOLUNTEER 2EC with postemergence broadleaf herbicides have shown some reduction or failure to control certain grass species which would have otherwise been controlled when VOLUNTEER 2EC is applied alone. Activity of the postemergence broadleaf herbicide in the tank mix is not affected.

ALFALFA

Table 1. VOLUNTEER 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR ALFALFA
(Refer to the tables above for specified grasses and growth stages)

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
VOLUNTEER 2EC + 2,4-DB ⁴	10 to 16 fl. oz. + Refer to 2,4DB label	10 to 16 fl. oz. + Refer to 2,4DB label	1%	1%
VOLUNTEER 2EC + imazethapyr ⁵	10 to 16 fl. oz. + Refer to imazethapyr product label	-	1%	1%
VOLUNTEER 2EC + bromoxynil (octanoate and/or heptanoate) ^{6,7}	10 to 16 fl. oz. + Refer to bromoxynil product label	-	0.5%	0.5%

¹If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix herbicide), according to the appropriate size and rates.

²Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations.

³Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

⁴VOLUNTEER 2EC plus 2,4DB may increase the severity of crop injury when tank mixed. Alfalfa plants will generally outgrow this temporary crop injury within a few weeks.

⁵Before using this tank mix, read and understand the imazethapyr product label for geographical restrictions and restrictions regarding alfalfa growth stage and type. Failure to do so can result in crop injury to alfalfa. Do not feed, graze, or harvest alfalfa for 30 days following an application of imazethapyr to alfalfa.

⁶In the states of Washington, Oregon, Idaho, Montana, Wyoming, Colorado, Utah, Nevada and the western halves of North Dakota, South Dakota, Nebraska, and Kansas: VOLUNTEER 2EC plus bromoxynil tank mix must be applied in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 2 trifoliates. Unacceptable crop injury may occur to alfalfa seedlings less than the 2 trifoliolate leaf stage. VOLUNTEER 2EC plus bromoxynil applications made when temperatures are

expected to exceed 80°F at (and 3 days following) application can result in unacceptable crop injury. In the states listed above, apply in the fall or spring to seedling alfalfa when the majority of the field has a minimum of 4 trifoliolate leaves. When alfalfa stand is uneven and conditions favor leaf burn, unacceptable crop injury may occur to alfalfa in the 2 trifoliolate or smaller stage of growth. VOLUNTEER 2EC plus bromoxynil applications made when temperatures are expected to exceed 70°F at (and 3 days following) application can result in unacceptable crop injury. Crop leaf burn can occur following VOLUNTEER 2EC plus bromoxynil application. Warm, humid conditions may enhance leaf burn. New crop growth will not be affected.

⁷Do not apply when alfalfa is under moisture, temperature, insect or disease stress or has been stressed by other pesticide carryover or application.

CANOLA

Table 2. REDUCED RATE VOLUNTEER 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR CANOLA

(Refer to the tables above for specific grasses and growth stages.)

PRODUCT	APPLICATION RATES/ACRE ¹		AMMONIUM SULFATE	
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	GROUND	AIR
	VOLUNTEER 2EC ² + glufosinate ³	4 to 5 fl. oz. + Refer to glufosinate product label	-	3.0 lbs.

¹Annual grasses and sizes controlled with these tank mixtures are those that are identified in the **DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES table.**

²Do not apply VOLUNTEER 2EC tank mix during or after bolting or flowering or crop injury may occur.

³For use only on glufosinate-tolerant canola.

COTTON

Table 3. VOLUNTEER 2EC TANK MIXED WITH LACTOFEN AND MSMA APPLIED POST DIRECTED TO COTTON

PRODUCT ¹	APPLICATION RATE/ACRE ²		CROP OIL CONCENTRATE ³ V/V	COMMENTS
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	
VOLUNTEER 2EC ⁴ + lactofen + MSMA	6 to 8 fl. oz.	8 to 16 fl. oz.	1%	Reduce broadcast rate in proportion to the band area actually treated.
	Refer to lactofen product label for rates to control broadleaf weeds and height limitations for cotton. Refer to the VOLUNTEER 2EC label for weed height and species controlled.			
	Refer to MSMA label for rates to control broadleaf weeds and height limitations for cotton. Refer to the VOLUNTEER 2EC label for weed height and species controlled.			

¹Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations.

²If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix herbicide), according to the appropriate size and rate directions.

³Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

⁴If at the time of application, grass height is so tall that post-directed applications cannot get good coverage over the top of the grassy weeds then poor control may result and a second (non-post directed) application of VOLUNTEER 2EC may be necessary.

COTTON (continued)

Table 4. VOLUNTEER 2EC TANK MIXED WITH BROMOXYNIL TO CONTROL EMERGED WEEDS IN BXN COTTON AS A BROADCAST APPLICATION

PRODUCT ¹	APPLICATION RATE/ACRE ²	CROP OIL CONCENTRATE ³	COMMENTS ⁷
	ANNUAL GRASSES		
VOLUNTEER 2EC + Bromoxynil ^{4,5,6} (octanate and/or heptanoate)	8 to 16 fl. oz. Refer to bromoxynil product label for rates to control broadleaf weeds and height limitations for cotton.	1 qt.	See charts for grasses controlled.

¹Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage.

²If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC at the specified rate with the appropriate amount of crop oil concentrate in a non-BUCTRIL tank mix.

³Always add a crop oil concentrate at 1 qt./A by ground in the finished spray volume.

⁴Applications of bromoxynil can be made only to cotton that has been genetically modified for crop tolerance to postemergence over-the-top applications of bromoxynil.

⁵Do not apply the VOLUNTEER 2EC plus bromoxynil tank mix within 75 days of harvest.

⁶Do not exceed 2 applications of bromoxynil before cotton is 12 inches tall and one application after 12 inches tall.

⁷Use a minimum of 10 gals. of spray solution per acre.

Table 5. VOLUNTEER 2EC TANK MIXED WITH GLYPHOSATE TO CONTROL EMERGED GRASSES IN COTTON AS A BROADCAST APPLICATION

PRODUCT	APPLICATION RATE/ACRE ¹		ADJUVANT		COMMENTS
	ANNUAL GRASSES	PERENNIAL GRASSES	Glyphosate formulation with built in adjuvant	Glyphosate formulation without built in adjuvant	
VOLUNTEER 2EC + glyphosate	6 to 8 fl. oz. Refer to glyphosate product label for rates to control broadleaf weeds and height limitations for cotton.	8 to 16 fl. oz.	Non-ionic surfactant @ 0.125 to 0.25% v/v plus ammonium sulfate @ 8.5 to 17 lbs. per 100 gals. of carrier	Crop oil concentrate @ 1 pt./A plus ammonium sulfate @ 8.5 to 17 lbs. per 100 gals. of carrier	See charts for grasses controlled. Use a minimum of 10 gals. of spray solution per acre.

¹If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC at the specified rate with the appropriate amount of crop oil concentrate.

DRY AND SUCCULENT SHELLED BEANS

Table 6. VOLUNTEER 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR DRY AND SUCCULENT SHELLED BEANS

(Refer to the tables above for specific grasses and growth stages.)

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
VOLUNTEER 2EC + sodium bentazon	8 to 10 fl. oz. + Refer to sodium bentazon product label	10 to 16 fl. oz. + Refer to sodium bentazon product label	1%	1%

¹If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix herbicide), according to the appropriate size and rate directions.

²Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations.

³Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

FLAX

Table 7. REDUCED RATE VOLUNTEER 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR FLAX (Refer to the tables above for specific grasses and growth stages)

PRODUCT	APPLICATION RATES/ACRE		CROP OIL CONCENTRATE/ACRE	
	ANNUAL GRASSES ¹	PERENNIAL GRASSES	GROUND	AIR
VOLUNTEER 2EC + bromoxynil ^{2,3} (octanoate and/or heptanoate, with or without MCPA)	4 to 5 fl. oz. + Refer to bromoxynil product label	-	1 pt.	1 pt.
VOLUNTEER 2EC + MCPA, 2-ethylhexyl ester ^{2,3}	4 to 5 fl. oz. + Refer to MCPA label	-	1 pt.	1 pt.

¹Annual grasses and sizes controlled with these tank mixtures are those that are identified in the DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES table.

²Do not apply VOLUNTEER 2EC tank mix during or after the bud stage or to ornamental flax or crop injury may occur.

³Do not apply tank mixes if temperatures are expected to exceed 85°F at (or 3 days following) application or crop injury may occur.

SOYBEAN

Table 8. VOLUNTEER 2EC TANK MIXES³ TO CONTROL ANNUAL GRASSES WHEN USED AS A BURNDOWN IN NO-TILL SOYBEAN.

PRODUCT	PRODUCT RATE/ACRE ¹	GRASS HEIGHT (inches)	CROP OIL CONCENTRATE/ACRE ²	28%N OR 32%N QTS./A OR 2.5 to 4.0 LBS. AMS
VOLUNTEER 2EC	3 fl. oz.	Foxtail 1 to 3 Fall Panicum 1 to 3	1 qt.	1 to 2 qts. Or 2.5 to 4.0 lbs. AMS
VOLUNTEER 2EC	4 fl. oz.	Foxtail 1 to 4 Fall Panicum 1 to 4	1 qt.	1 to 2 qts. Or 2.5 to 4.0 lbs. AMS
VOLUNTEER 2EC + 2,4-D ester* ³	6 to 8 fl. oz. + Refer to 2,4-D ester product label	(See Grass Chart for grasses claimed.)	1 qt.	1 to 2 qts. Or 2.5 to 4.0 lbs. AMS

*Do not use 2-4-D ester where drift sensitive crops may be grown.

¹If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix herbicide), according to the appropriate size and rate directions.

²Always use a crop oil concentrate at the listed rate in the finished spray volume.

³The following products can be tank mixed with VOLUNTEER 2EC plus 2, 4-D ester: flumioxazin, chlorimuron, sulfentrazone, metolachlor, s-metalochlor, pendimethalin, metribuzin

Table 9. VOLUNTEER 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN (Refer to the tables above for specific grasses and growth stages.)

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V) ⁸	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
VOLUNTEER 2EC + lactofen	6 to 8 fl. oz. + Refer to lactofen product label	8 to 16 fl. oz. + Refer to lactofen product label	0.5 to 1%	1%
VOLUNTEER 2EC + sodium bentazon	8 to 10 fl. oz. + Refer to sodium bentazon product label	10 to 16 fl. oz. + Refer to sodium bentazon product label.	1%	1%
VOLUNTEER 2EC + glyphosate (For use on glyphosate-tolerant soybean only)	6 to 8 fl. oz. + Refer to glyphosate product label	8 to 16 fl. oz. + Refer to glyphosate product label	0.5 to 1% ⁴	1% ⁴
VOLUNTEER 2EC + sodium acifluorfen	6 to 8 fl. oz. + Refer to sodium acifluorfen product label	6 to 8 fl. oz. + Refer to sodium acifluorfen product label	0.5 to 1%	1%

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V) ⁸	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
VOLUNTEER 2EC + fomesafen ⁶	6 to 8 fl. oz. + Refer to fomesafen product label	8 to 16 fl. oz. + Refer to fomesafen product label	1%	1%
VOLUNTEER 2EC + chlorimuron 25%	8 to 10 fl. oz. + Refer to chlorimuron 25% product label	10 to 18 fl. oz. + Refer to chlorimuron product label	1%	1%
VOLUNTEER 2EC ⁴ + imazethapyr	6 to 8 fl. oz. + Refer to imazethapyr product label	8 to 16 fl. oz. + Refer to imazethapyr product label	1%	1%
VOLUNTEER 2EC ⁵ + lactofen + chlorimuron 25%	8 to 10 fl. oz. + Refer to lactofen product label + Refer to chlorimuron 25% product label	-	0.5%	1%
VOLUNTEER 2EC ⁵ + lactofen + sodium bentazon	8 to 10 fl. oz. + Refer to lactofen product label + Refer to sodium bentazon product label	-	0.5%	1%
VOLUNTEER 2EC ⁵ + lactofen + imazethapyr	8 to 10 fl. oz. + Refer to lactofen product label + Refer to imazethapyr product label	-	0.5%	1%
VOLUNTEER 2EC ⁵ + sodium bentazon+sodium acifluorfen	8 to 10 fl. oz. + Refer to sodium bentazon+sodium acifluorfen product label	-	0.5%	1%

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V) ⁸	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
VOLUNTEER 2EC ⁵ + flumiclorac + imazethapyr	8 to 10 fl. oz. + Refer to flumiclorac product label + Refer to imazethapyr product label	-	1%	1%
VOLUNTEER 2EC ⁵ + flumiclorac + sodium bentazon	8 to 10 fl. oz. + Refer to flumiclorac product label + Refer to sodium bentazon product label	-	1%	1%
VOLUNTEER 2EC ⁵ + flumiclorac + chlorimuron 25%	8 to 10 fl. oz. + Refer to flumiclorac product label + Refer to chlorimuron 25% product label	-	1%	1%
VOLUNTEER 2EC ⁵ + lactofen + flumiclorac	6 to 8 fl. oz. + Refer to lactofen product label + Refer to flumiclorac product label	-	0.5%	1%
VOLUNTEER 2EC ⁵ + cloransulam-methyl	6 to 8 fl. oz. + Refer to cloransulam-methyl product label	8 to 16 fl. oz. + Refer to cloransulam- methyl product label	1%	-
VOLUNTEER 2EC ⁵ + lactofen + cloransulam-methyl	6 to 8 fl. oz. + Refer to lactofen product label + Refer to cloransulam-methyl product label	6 to 8 fl. oz. + Refer to lactofen product label + Refer to cloransulam- methyl product label	1%	-
VOLUNTEER 2EC ⁵ + imazamox	6 to 8 to fl. oz. + Refer to imazamox product label	-	1%	-

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V) ⁸	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
VOLUNTEER 2EC ⁵ + lactofen + imazamox	6 to 8 fl. oz. + Refer to lactofen product label + Refer to imazamox product label	-	1%	-
VOLUNTEER 2EC ⁵ + chlorimuron 21.5%	6 to 8 fl. oz. ⁷ + Refer to chlorimuron 21.5% product label	-	1 qt./acre	-
VOLUNTEER 2EC ⁵ + lactofen + chlorimuron 21.5%	6 to 8 fl. oz. ⁷ + Refer to lactofen product label + Refer to chlorimuron 21.5% product label	-	1 pt./acre	-
VOLUNTEER 2EC ⁵ + flumiclorac	6 to 8 fl. oz. + Refer to flumiclorac product label	-	1qt./acre	-
VOLUNTEER 2EC ⁵ + cloransulam- methyl+flumetsulam	8 to 10 fl. oz. + Refer to cloransulam- methyl+flumetsulam product label	-	1%	-
VOLUNTEER 2EC + cloransulam-methyl + fomesafen sodium	6 to 8 fl. oz. + Refer to cloransulam-methyl product label + Refer to the fomesafen sodium label	8 to 16 fl. oz. + Refer to cloransulam- methyl product label + Refer to the fomesafen sodium label	1%	-

¹If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix herbicide), according to the appropriate size and rate directions.

²Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations.

³Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

⁴The addition of 2.5 lb. of ammonium sulfate is required when VOLUNTEER 2EC is tank mixed with glyphosate. If the glyphosate formulation has a stand alone built in adjuvant, add 0.125% v/v non-ionic surfactant in place of crop oil concentrate for ground application and 1% v/v for aerial application.

⁵The addition of 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N, or 32%N) is recommended when VOLUNTEER 2EC is tank mixed with imazethapyr, flumiclorac, sodium bentazon+sodium acifluorfen, cloransulam-methyl, chlorimuron 21.5%, imazamox, cloransulam-methyl+flumetsulam, lactofen plus imazamox. An equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added in place of liquid fertilizer. Fertilizer adjuvants are to be added in addition to the crop oil concentrate.

⁶Refer to fomesafen product label for geographic and rotational instructions.

⁷Annual grasses and sizes controlled with these tank mixtures are those that are identified in the **DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES** table.

⁸Rates are expressed as volume/volume unless otherwise noted.

SOYBEAN (continued)

Table 10. REDUCED RATE VOLUNTEER 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR SOYBEAN (Refer to table for reduced rate use in canola, dry shelled bean & pea, edible podded legume vegetables, flax, mustard seed, soybean, succulent bean & pea and sugar beet use rates for small annual grasses specific grasses and growth stages)

PRODUCT	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ^{3,4} (V/V)	
	ANNUAL GRASSES ²	PERENNIAL GRASSES	GROUND	AIR
VOLUNTEER 2EC + cloransulam-methyl	4 to 8 fl. oz. + Refer to cloransulam-methyl product label	-	1%	1%
VOLUNTEER 2EC + imazethapyr	4 to 6 fl. oz. + Refer to imazethapyr product label	-	1%	1%

¹If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix herbicide), according to the appropriate size and rate directions.

² Annual grasses and sizes controlled with these tank mixtures are those that are identified in the **DIRECTIONS FOR REDUCED RATE TO CONTROL SMALL ANNUAL GRASSES** table.

³Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

⁴ The addition of 1 to 2 qts./A of liquid fertilizer (10-34-0, 28%N, or 32%N) is required when VOLUNTEER 2EC is tank mixed at reduced rates. An equivalent amount (2.5 to 4.0 lbs./A) of spray grade ammonium sulfate (AMS) may be added in place of liquid fertilizer. Fertilizer adjuvants are to be added in addition to the crop oil concentrate.

PEANUT (INCLUDING PERENNIAL)

Table 11. VOLUNTEER 2EC TANK MIXES WITH BROADLEAF HERBICIDES FOR PEANUT (INCLUDING PEANUT)

(Refer to the tables above for specific grasses and growth stages.)

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES ²	PERENNIAL GRASSES	GROUND	AIR
VOLUNTEER 2EC + bentazon	8 to 10 fl. oz. + Refer to bentazon product label	-	1%	1%
VOLUNTEER 2EC + sodium acifluorfen	8 to 10 fl. oz. + Refer to sodium acifluorfen label	-	1%	1%
VOLUNTEER 2EC + sodium bentazon+sodium acifluorfen	8 to 10 fl. oz. + Refer to sodium bentazon+sodium acifluorfen product label	-	1%	1%

¹If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix herbicide), according to the appropriate size and rate directions.

²Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations.

³Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

DIRECTIONS FOR GRASS SUPPRESSION FOR HARVEST EFFICIENCY IN PEANUT (INCLUDING PERENNIAL) WITH VOLUNTEER 2EC			
GRASS SPECIES	WEED STAGE	RATE FL. OZ./ ACRE	HIGH RATE
Annual and perennial grasses that exceed height claimed for control on height charts "DIRECTIONS FOR ANNUAL GRASSES" & "DIRECTIONS FOR PERENNIAL GRASSES"	Up to and including grasses in the seed head stage.	16	32
Do not apply as part of a tank mix when applying VOLUNTEER 2EC for grass suppression.			
Add a crop oil concentrate at 1 qt./A by ground to the finished spray volume.			

SUGAR BEET

Table 12. VOLUNTEER 2EC TANK MIXED WITH CLOPYRALID APPLIED TO SUGAR BEET
(Refer to the tables above for specific grasses and growth stages)

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)	
	ANNUAL GRASSES	PERENNIAL GRASSES	GROUND	AIR
	VOLUNTEER 2EC + clopyralid	6 to 8 fl. oz.		
Refer to clopyralid product label for rates.				

¹If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix herbicide), according to the appropriate size and rate directions.

²Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations.

³Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

Table 13. VOLUNTEER 2EC TANK MIXED WITH DESMEDIPHAM OR PHENMEDIPHAM+DESMEDIPHAM APPLIED TO SUGAR BEET

PRODUCT ¹	WEEDS CONTROLLED		WEED HEIGHT (inches)	APPLICATION RATE/ACRE ²
	COMMON NAME	SCIENTIFIC NAME		
VOLUNTEER 2EC ³ + desmedipham or phenmedipham+desmedipham	Barnyardgrass	<i>Echinochloa</i>	1 to 3	8 fl. oz.
	Foxtail	<i>crus-galli</i>	1 to 3	
	Foxtail Millet	<i>Setaria spp.</i>	1 to 3	
	Wild Oat	<i>Setaria</i>	1 to 3	
	Wild Proso Millet	<i>italica</i>	1 to 3	
		<i>Avena fatua</i>		
		<i>Panicum</i>		
		<i>miliaceum</i>		
			See desmedipham or phenmedipham+desmedipham product label for rate to control broadleaf weeds. No additives are recommended in the tank mix.	

¹ Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations.

² Do not use crop oil concentrate. No additives are recommended in the tank mix. If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix herbicide), according to the appropriate size and rate directions.

³ If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC at full label rate with appropriate rate of crop oil concentrate.

Table 14. VOLUNTEER 2EC PLUS DESMEDIPHAM OR PHENMEDIPHAM+DESMEDIPHAM TANK MIX FOR THREE SEQUENTIAL APPLICATIONS FOR ANNUAL GRASS CONTROL (MICRO-RATE APPLICATION)

PRODUCT	APPLICATION RATES/ACRE ¹		METHYLATED SEED OIL ² (V/V)	
	ANNUAL GRASSES	GRASSES CONTROLLED (inches)	GROUND	AIR
			2 to 3 fl. oz. + Refer to desmedipham product label Or Refer to phenmedipham+desmedipham product label	Green Foxtail (1-2) Yellow Foxtail (1-2) Barnyardgrass (1-2) Wild Oat (1-2) Volunteer Cereals (1-2)

¹ Broadleaf weed control may be reduced when grass populations are tall or dense enough to intercept the spray pattern and prevent them from receiving complete coverage. Tank mixing is not recommended in these situations.

²Always use a methylated seed oil at the listed rate (but not less than 1 pt./A) in the finished spray volume.

³Use 8 fl. oz./A rate when sugar beet are in the cotyledon to 4 leaf stage. Rate can be increased up to 12 fl. oz./A when the smallest sugar beet plants in the field are in the 4 true leaf stage or larger.

Directions for Use for Micro-Rate Applications to Sugar Beet

Product Information

Multiple micro-rate applications of VOLUNTEER 2EC in tank mixtures with reduced rates of desmedipham or phenmedipham+desmedipham and methylated seed oils may be applied by air or ground equipment to sugar beet to control early germinating annual grasses listed above. The rate of desmedipham or phenmedipham+desmedipham must not exceed 0.12 lb. ai./A (broadcast application) when in combination with these spray adjuvants. Note that the maximum rate allowed varies depending on crop growth stage. The use of wetting agents or spray adjuvants with conventional rates (0.73 to 1.22 lb. ai./A) or multiple low rate (0.24 to 0.73 lb. ai./A) applications of desmedipham or phenmedipham+desmedipham is prohibited on the desmedipham and phenmedipham+desmedipham master label. Favorable climatic conditions (good conditions for plant growth and development) are essential for adequate weed control. All use precautions and restrictions on the desmedipham and phenmedipham+desmedipham master labels must be followed.

Directions for Using Micro-Rate Multiple Applications of VOLUNTEER 2EC Tank Mixes

Apply VOLUNTEER 2EC in broadcast applications only at a rate of 2 to 3 fl. oz./A in tank mixture with either desmedipham or phenmedipham+desmedipham following the directions for use on the tank mix partner label. Utilize a minimum of three sequential applications of 2 fl. oz./A or a minimum of 2 sequential applications of 3 fl. oz./A for VOLUNTEER 2EC tank mixtures. Use a minimum of 3 sequential applications of phenmedipham+desmedipham or desmedipham. Accurate timing is essential; make initial application immediately after weeds emerge, and make repeat applications on 5 to 7 day intervals. If weed control is not adequate due to climatic conditions, spray coverage or other factors, return to conventional application rates of VOLUNTEER 2EC (6 to 8 fl. oz./A) and add rates of desmedipham or

phenmedipham+desmedipham as directed on their label. When using conventional rates of desmedipham or phenmedipham+desmedipham in tank mixtures with VOLUNTEER 2EC, a spray adjuvant is not recommended.

**Use Precautions for Micro-Rate Applications:
(See desmedipham and phenmedipham+desmedipham labels for further use precautions.)**

Not all weeds will be adequately controlled, even with favorable climatic conditions. Conventional rates of VOLUNTEER 2EC, desmedipham or phenmedipham+desmedipham and/or hand labor may be required if multiple micro-rate applications do not adequately control weeds. Plugging of spray nozzles may be encountered due to the potential for formation of a precipitate in the spray solution that is often associated with micro-rate applications. To the extent consistent with applicable law, Tenkoz, Inc. will not be responsible for any nozzle plugging that may occur with the use of multiple micro-rate applications. Methylated seed oils must not be added if the desmedipham or phenmedipham+desmedipham rate exceeds 0.12 lb. ai/A broadcast, as the addition of methylated seed oils could increase the possibility of crop injury at dosage rates greater than 0.12 lb. ai./A.

GROUND APPLICATION

Use of sufficient spray volumes and pressure is essential to ensure complete coverage. Use a minimum of 10 gals. and a maximum of 20 gals. of spray solution per acre. Spray pressures should reflect a minimum of 30 psi and a maximum of 60 psi at the nozzle. Do not use flood nozzles.

AERIAL APPLICATION

Use of sufficient spray volumes is essential to ensure complete coverage. Use a minimum of 5 gals. and a maximum of 15 gals. of spray solution per acre.

Table 15. TANK MIX APPLICATION OF VOLUNTEER 2EC AND FUNGICIDES FOR CONTROL OF GRASS WEEDS AND DISEASES IN SUGAR BEET

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ³ (V/V)
	ANNUAL GRASSES	PERENNIAL GRASSES	
VOLUNTEER 2EC + tetraconazole	6 to 8 fl. oz. + Refer to tetraconazole product label	8 to 16 fl. oz. + Refer to tetraconazole product label	1%

¹If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix fungicide) according to the appropriate size and rate directions.

²Refer to VOLUNTEER 2EC and fungicide label for rates and weeds and diseases controlled.

³Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

Table 16. TANK MIX APPLICATION OF VOLUNTEER 2EC AND INSECTICIDES FOR CONTROL OF GRASS WEEDS AND INSECTS IN ALFALFA, COTTON, MINT, PEANUT (INCLUDING PERENNIAL), SOYBEAN AND SUNFLOWER

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE (V/V) ³	CROP					
	ANNUAL GRASSES	PERENNIAL GRASSES		Alfalfa ⁴	Cotton	Mint ^{4,5}	Peanut	Soybean	Sunflower
VOLUNTEER 2EC + acephate 75% or acephate 97.4%	6 to 8 fl. oz. + Refer to acephate 75% product label Refer to acephate 97.4% label	8 to 16 fl. oz. + Refer to acephate 75% product label Refer to acephate 97.4% label	1%		X	X	X		
VOLUNTEER 2EC + acephate 90% ⁶	6 to 8 fl. oz. + Refer to acephate 90% product label	8 to 16 fl. oz. + Refer to acephate 90% product label	1%		X	X	X	X	
VOLUNTEER 2EC + fenprothrin	6 to 8 fl. oz. + Refer to fenprothrin product label	8 to 16 fl. oz. + Refer to fenprothrin product label	1%		X		X		
VOLUNTEER 2EC + esfenvalerate	6 to 8 fl. oz. + Refer to esfenvalerate product label	8 to 16 fl. oz. + Refer to esfenvalerate product label	1%						X
VOLUNTEER 2EC + lambda-cyhalothrin	6 to 8 fl. oz. + Refer to lambda-cyhalothrin product label	8 to 16 fl. oz. + Refer to lambda-cyhalothrin product label	1%						X
VOLUNTEER 2EC + lambda-cyhalothrin	10 to 16 fl. oz. ⁷ + Refer to lambda-cyhalothrin product label	10 to 16 fl. oz. + Refer to lambda-cyhalothrin product label	1%	X					
VOLUNTEER 2EC + beta-cyfluthrin	10 to 16 fl. oz. ⁷ + Refer to beta-cyfluthrin product label	10 to 16 fl. oz. + Refer to beta-cyfluthrin product label	1%	X					

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE (V/V) ³	CROP					
	ANNUAL GRASSES	PERENNIAL GRASSES		Alfalfa ⁴	Cotton	Mint ^{4,5}	Peanut	Soybean	Sunflower
VOLUNTEER 2EC + dimethoate	10 to 16 fl. oz. ⁷ + Refer to dimethoate product label	10 to 16 fl. oz. + Refer to dimethoate product label	1%	X					

Table 16. TANK APPLICATION OF VOLUNTEER 2EC AND INSECTICIDES FOR CONTROL OF GRASS WEEDS AND INSECTS IN ALFALFA, COTTON, MINT, PEANUTS (INCLUDING PERENNIAL), SOYBEAN AND SUNFLOWER (continued)

PRODUCT ²	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE (V/V) ³	CROP					
	ANNUAL GRASSES	PERENNIAL GRASSES		Alfalfa ⁴	Cotton	Mint ^{4,5}	Peanut	Soybean	Sunflower
VOLUNTEER 2EC + chlorpyrifos	10 to 16 fl. oz. ⁷ + Refer to chlorpyrifos product label	10 to 16 fl. oz. + Refer to chlorpyrifos product label	1 to 2 pt./acre ⁸	X					
VOLUNTEER 2EC + permethrin	10 to 16 fl. oz. ⁷ + Refer to chlorpyrifos product label	10 to 16 fl. oz. + Refer to chlorpyrifos product label	1%	X					

¹If grass regrowth occurs or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC alone (without a tank mix fungicide) according to the appropriate size and rate directions.

²Refer to VOLUNTEER 2EC and insecticide label for rates and weeds and insecticides controlled.

³Always use a crop oil concentrate at the listed rate (but not less than 1 pt./A) in the finished spray volume.

⁴Certain insecticides may cause temporary phytotoxic symptoms on alfalfa and mint foliage. Refer to the insecticide label for further information. It is suggested that prior to using any of these insecticide/herbicide tank mixtures, that a small area of the field be treated first and observations for crop injury be made prior to treating the whole field.

⁵The VOLUNTEER 2EC rate is 6 to 8 fl. oz./A for annual grass control in baby mint, minimum of 8 fl. oz./A for annual grass control in established mint and 8 to 16 fl. oz./A for perennial grass control. Add crop oil concentrate at the rate of 1.0 to 2.0 pts./A.

⁶Insecticide tank mix use with acephate 90% in soybean is permitted only in a state having an approved Section 24(c) registration for acephate 90% use in soybean.

⁷The VOLUNTEER 2EC rate is 6 to 8 fl. oz./A for annual grass control in seedling alfalfa.

⁸For the VOLUNTEER 2EC plus chlorpyrifos tank mix, reduce the adjuvant rate down to 1.0 pt./A when the chlorpyrifos rate is 1.0 pt./A or higher.

Table 17. DIRECTIONS FOR ROUNDUP READY VOLUNTEER CORN CONTROL IN GLYPHOSATE-TOLERANT SOYBEAN WITH VOLUNTEER 2EC HERBICIDE TANK MIX

Glyphosate-Tolerant Volunteer Corn Height (inches)	VOLUNTEER 2EC Rate fl. oz./A	Glyphosate¹ rate for Formulations with built in Adjuvant	Adjuvant
<12	4	Refer to glyphosate product label	Non-ionic surfactant @ 0.125 to 0.25% v/v plus Ammonium sulfate @ 8.5 to 17 lbs. per 100 gals./ of carrier
12 to 18	5		
18 to 24	6		
<12	4	Refer to glyphosate product label.	Crop oil concentrate @ 1 pt./A plus Ammonium sulfate @ 8.5 to 17 lbs. per 100 gals./ of carrier
12 to 18	5		
18 to 24	6		

¹Glyphosate formulation must be labeled for use on Roundup Ready soybean.

It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

- Apply only to actively growing grass and broadleaf weeds at labeled height or growth stage listed on each label.
- Apply under favorable soil moisture and humidity which exist a few days after rainfall or within seven days after irrigation.
- Tank mix applications may sometimes result in reduced grass control. If regrowth occurs, or an additional flush of new grass emerges, make a second application of VOLUNTEER 2EC, as specified in the respective size and rate tables.
- Do not tank mix VOLUNTEER 2EC when broadleaf weeds are tall and/or dense enough to prevent proper grass coverage.
- This tank mix may be applied postemergence to glyphosate-tolerant soybean up through the full flowering stage. Do not apply less than 60 days before harvest.
- Avoid contact with foliage, green stems, or fruit crops, or any desirable plants and trees, other than soybean with the ROUNDUP READY gene as severe injury or destruction will result.
- Do not allow the VOLUNTEER 2EC plus glyphosate to mist, drip, drift or splash onto desirable vegetation as minute quantities of the tank mix can cause severe damage or destruction to the crops, plants or other areas on which treatment was not intended. The likelihood of injury occurring from drift of this product is greatest when winds are gusty or in excess of 5 miles per hour. Even under lesser wind velocities, avoid conditions that allow spray drift to occur such as combinations of spray pressure and nozzle type that will result in fine particles (mist) that are likely to drift.

FALLOW LAND

DIRECTIONS FOR USE

VOLUNTEER 2EC may be used to control annual and perennial grasses in land that has been left fallow the previous year and other non-producing agricultural areas. Apply VOLUNTEER 2EC at 6 to 8 fl. oz./A for annual grasses and 8 to 16 fl. oz./A for perennial grasses. When both grass and broadleaf weeds are the target pest, VOLUNTEER 2EC may be tank mixed with 2,4-D ester or dicamba for broad spectrum control. When both annual and perennial grasses occur in the same field, use a minimum of 8 fl. oz./A VOLUNTEER 2EC rate.

PRODUCT INFORMATION:

- Use a minimum spray volume of 5 gals./A for aerial applications and 15 gals./A for ground applications.
- Apply only to actively growing grasses when the first grass reaches the specified weed height as specified by the Directions for Annual and Perennial Grasses section of this label.
- Annual grasses that emerge after the VOLUNTEER 2EC application will not be controlled, and a second application may be necessary.
- The control of perennial grasses may require more than 1 application in non-tilled areas.
- Do not plant any crop for 30 days after application unless clethodim is registered for use in that crop.
- Do not apply to grasses that have tillered, formed seedheads or exceeded labeled growth stage.
- Do not use flood jet nozzles.
- Do not apply to drought stressed grasses.
- Do not mow area for 2 weeks prior to or after the VOLUNTEER 2EC application.
- Maximum number of applications is 4.
- Maximum annual application rate is 1.04 lbs. a.i./A.

Table 18. VOLUNTEER 2EC IN TANK MIXES TO CONTROL ANNUAL AND PERENNIAL GRASSES IN FALLOW LAND

PRODUCT	APPLICATION RATES/ACRE ¹		CROP OIL CONCENTRATE ² (V/V) Ground/Air
	ANNUAL GRASSES	PERENNIAL GRASSES	
VOLUNTEER 2EC + 2,4-D ester or dicamba	6 to 8 fl. oz. + Refer to 2,4-D ester product label Or Refer to dicamba product label	8 to 16 fl. oz.	1%

¹Refer to VOLUNTEER 2EC label for weed height and species control. Review dicamba and 2,4-D labels for crop restrictions, use rates and weeds controlled.

²Always use a crop oil concentrate or methylated seed oil containing at least 15% emulsifier at the listed rate (but not less than 1 pt./A) in the finished spray volume.

**Table 19: DIRECTIONS FOR GRASS SUPPRESSION IN NON-CROP AREAS
WITH VOLUNTEER 2EC**

GRASS SPECIES	WEED STAGE	RATE FL. OZ./ ACRE	HIGH RATE
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Annual and perennial grasses that exceed height claimed for control on height charts	Up to and including grasses in the seed head stage.	12	16
Do not apply as part of a tank mix when applying VOLUNTEER 2EC for grass suppression.			
Add a crop oil concentrate at 1 qt./A by ground to the finished spray volume.			

Table 20. VOLUNTEER 2EC FOR THE CONTROL AND/OR SUPPRESSION OF TALL FESCUE IN NATIVE PRAIRIE WARM-SEASON GRASS RESTORATION PROJECTS

PRODUCT	PRODUCT RATES	GRASS WEEDS CONTROLLED/SUPPRESSED		WEED STAGES
		Common Name	Scientific Name	
VOLUNTEER 2EC	10 to 12 fl. oz./A	Tall Fescue	<i>Festuca arundinacea</i>	4 to 6 inches tall (40 to 60% green-up)
Adjuvant: VOLUNTEER 2EC must be applied with crop oil concentrate at 1 qt./A, plus a spray grade ammonium sulfate at 2.5 to 4 lbs./A. Mixing Order: Thoroughly mix spray grade ammonium sulfate in water, add VOLUNTEER 2EC, then add crop oil concentrate.				

SPECIAL APPLICATION INSTRUCTIONS

Burn or mow fields a minimum of 3 weeks prior to application to remove excess crop residue. Apply in the spring, at 40 to 60% tall fescue green-up, prior to emergence of warm-season grasses. Do not mow area for 2 weeks after the VOLUNTEER 2EC application.

Apply in a minimum of 15 to 20 gals. of water per acre at a spray pressure of 40 to 60 PSI at the nozzle. Apply using flat fan or hollow cone nozzles. Do not use flood jet nozzles.

Apply only to fields that have warm-season grasses established for 2 years. Applications of VOLUNTEER 2EC to emerged warm-season grasses may cause injury. Do not apply to warm-season grasses grown for seed.

Do not graze treated fields or feed treated forage and/or hay to livestock. Do not plant any crop for 30 days after application, unless clethodim is registered for use in that crop.

VOLUNTEER 2EC applications are most effective if applied when average nighttime temperatures are consistently greater than or equal to 47°F.

Table 21. VOLUNTEER 2EC FOR THE SUPPRESSION OF TALL FESCUE SEED-HEADS IN NON-PRODUCING AGRICULTURAL AREAS

PRODUCT	PRODUCT RATE	SUPPRESSION	APPLICATION TIMING
VOLUNTEER 2EC	1 ½ to 2 fl. oz./A	Tall Fescue Seed-Heads (<i>Festuca arundinacea</i>)	(50 to 90% Tall Fescue green-up)

Adjuvant: VOLUNTEER 2EC must be applied with crop oil concentrate at 1 qt./A, plus a spray grade ammonium sulfate at 2.5 to 4 lbs./A. Mixing Order: Thoroughly mix spray grade ammonium sulfate in water, add VOLUNTEER 2EC, then add crop oil concentrate.

SPECIAL APPLICATION INSTRUCTIONS

Apply at 50 to 90% tall fescue green-up.

Use the higher VOLUNTEER 2EC rate if less tall fescue green matter is present.

Do not mow area for two weeks after the VOLUNTEER 2EC application.

Apply in a minimum of 15 to 20 gals. of water per acre at a spray pressure of 40 to 60 PSI at the nozzle. Apply using flat fan or hollow cone nozzles. Do not use flood nozzles.

2,4-D ester may be added to this tank mix for broadleaf control (see 2,4-D ester label for weeds controlled).

Do not graze treated fields or feed treated forage and/or hay to livestock. Do not plant any crop for 30 days after application, unless clethodim is registered for use in that crop.

DIRECTIONS FOR USE IN ORNAMENTALS

For ornamental plant uses, VOLUNTEER 2EC can be used to control labeled grass weeds in greenhouses, lathhouses, shadehouses, and around outdoor ornamentals, including nurseries, parks, roadside plantings, and structure landscapes.

IMPORTANT

VOLUNTEER 2EC successfully controls weeds in newly transplanted and established non-grassy ornamentals. Plant tolerance to VOLUNTEER 2EC at labeled rates has been found to be acceptable for the indicated genera and species listed below. Due to variability within species, crop growth stage, environmental conditions, and application techniques, it is recommended that the user determine if herbicide can be used safely on a few plants prior to widespread application. Neither the seller nor the manufacturer of VOLUNTEER 2EC have investigated the safety factor to ornamental plants not tested on the label.

The following plants have shown a tolerance for VOLUNTEER 2EC applications:

Table 22: ORNAMENTAL TREES

COMMON NAME	SCIENTIFIC NAME
Alder, Red	<i>Alnus rubra</i>
Ash	<i>Fraxinus</i> spp.
Basswood	<i>Tilia</i> spp.
Birch, European White	<i>Betula pendula</i>
Birch, River	<i>Betula nigra</i>
Birch, White	<i>Betula papyrifera</i>
Crabapple, Flowering	<i>Malus halliana</i>

COMMON NAME	SCIENTIFIC NAME
Dogwood, Flowering	<i>Cornus florida</i>
Golden Chain Tree	<i>Laburnum anagyroides</i>
Maples	<i>Acer</i> spp.
Mulberry, White	<i>Morus alba</i>
Oaks	<i>Quercus</i> spp.
Olive, Wild	<i>Elaeagnus angustifolia</i>
Redbud, Eastern	<i>Cercis Canadensis</i>
Sweet Gum, American	<i>Liquidambar styraciflua</i>

Table 23: GROUND COVERS

COMMON NAME	SCIENTIFIC NAME
Bugleweed, Carpet	<i>Ajuga reptans</i>
Ivy, English	<i>Hedera helix</i>
Japanese Spurge	<i>Pachysandra terminalis</i>
Lilyturf	<i>Liriope muscari</i>
Moneywort	<i>Lysimachia nummularia</i>
Mondo Grass, White	<i>Ophiopogon jaburan</i>
Mondo Grass, Dwarf	<i>Ophiopogon japonicas</i>
Periwinkle, Lesser	<i>Vinca minor</i>

Table 24: GARDEN FLOWERS AND PLANTS

COMMON NAME	SCIENTIFIC NAME
Ageratum	<i>Ageratum</i> spp.
Alyssum*, Sweet	<i>Lobular maritime</i>
Asparagus Fern	<i>Asparagus setaceous</i>
Bleeding Heart	<i>Lamprocapnos spectabilis</i>
Cast Iron Plant	<i>Aspidistra elatior</i>
Chrysanthemum	<i>Chrysanthemum</i> spp.
Cinquefoil	<i>Potentilla</i> spp.
Coleus	<i>Coleus</i> spp.
Coralbells	<i>Heuchera sanguine</i>
Cranesbill	<i>Geranium</i> spp.
Dahlia	<i>Dahlia</i> spp.
Daisy, Trailing African	<i>Osteospermum fruticosum</i>
Daylilly	<i>Hemerocallis</i> spp.
Dusty Miller	<i>Senecio cineraria</i>
Euonymus	<i>Euonymus</i> spp.
Gazania	<i>Gazania</i> spp.
Geranium, House	<i>Pelargonium hortorum</i>
Heather, False	<i>Cuphea hyssopifolia</i>
Hosta	<i>Hosta fortunei</i>
Iris	<i>Iris</i> spp.
Jasmine Tobacco	<i>Nicotiana alata</i>
Loosestrife	<i>Lythrum salicaria</i>
Marigold	<i>Tagetes</i> spp.
Partridgeberry	<i>Mitchella repens</i>

COMMON NAME	SCIENTIFIC NAME
Petunia*	<i>Petunia hybrida</i>
Phlox	<i>Phlox</i> spp.
Pinks	<i>Dianthus</i> spp.
Portulaca	<i>Portulaca grandiflora</i>
Salvia	<i>Salvia</i> spp.
Saxifrage	<i>Saxifrage</i> spp.
Sedum	<i>Sedum</i> spp.
Selloum	<i>Philodendron selloum</i>
Snapdragon*	<i>Antirrhinum majus</i>
Sweet Flag	<i>Acorus gramineus</i>
Tickseed	<i>Coreopsis grandiflora</i>
Touch-Me-Not	<i>Impatiens</i> spp.
Verbena	<i>Verbena</i> spp.
Violet	<i>Viola</i> spp.
Yarrow, Common	<i>Achillea millefolium</i>
Zinnia	<i>Zinnia elegans</i>

*Slight foliage or flower speckling has been observed on these species.

Table 25: SHRUBS

COMMON NAME	SCIENTIFIC NAME
Abelia	<i>Abelia</i> spp.
Anise, Purple	<i>Illicium floridanum</i>
Aucuba	<i>Aucuba</i> spp.
Azalea*	<i>Rhododendron</i> spp.
Bamboo	<i>Bambusa</i> spp.
Barberry, Japanese	<i>Berberis thunbergii</i>
Barberry, Magellan	<i>Berberis buxifolia</i>
Bayberry	<i>Myrica pensylvanica</i>
Bottlebrush	<i>Callistemon citrinus</i>
Boxwood, Common	<i>Buxus sempervirens</i>
Camellia, Common	<i>Camellia japonica</i>
Candytuft	<i>Iberis sempervirens</i>
Cleyera	<i>Cleyera japonica</i>
Coralberry	<i>Ardisia crenata</i>
Crape Myrtle	<i>Lagerstroemia indica</i>
Coyote Brush	<i>Baccharis pilularis</i>
Fig, Creeping	<i>Ficus pumila</i>
Gardenia	<i>Gardenia</i> spp.
Holly	<i>Ilex</i> spp.
Honeysuckle	<i>Lonicera</i> spp.
Indian Hawthorn	<i>Raphiolepis indica</i>
Jasmine	<i>Jasminum</i> spp.
Jasmine, Asiatic	<i>Trachelospermum asiaticum</i>
Jasmine, Star	<i>Trachelospermum jasminoides</i>
Juniper	<i>Juniperus</i> spp.
Lantana	<i>Lantana</i> spp.
Nandina* Bamboo, Heavenly	<i>Nandinia domestica</i>
Oleander, Common	<i>Nerium oleander</i>
Oregon Grape	<i>Mahonia aquifolium</i>

COMMON NAME	SCIENTIFIC NAME
Photinia	<i>Photinia</i> spp.
Pittosporum	<i>Pittosporum</i> spp.
Podocarpus	<i>Podocarpus</i> spp.
Privet	<i>Ligustrum</i> spp.
Pyracantha	<i>Pyracantha</i> spp.
Rhododendron	<i>Rhododendron</i> spp.
Rose	<i>Spiraea bumalda</i>
Sweet Olive	<i>Osmanthus fragrans</i>
Viburnum	<i>Viburnum tinus</i>
Wisteria	<i>Wisteria</i> spp.
Yellow Sage/Shrub Verbena	<i>Lantana camara</i>

*Slight foliage or flower speckling has been observed on these species.

DIRECTIONS FOR ANNUAL GRASSES IN ORNAMENTALS

- Apply only to actively growing grasses at labeled weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the labeled growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at a maximum height.

Table 26: Directions for Annual Grasses in Ornamentals

GRASS SPECIES	SCIENTIFIC NAME	WEED* HEIGHT (inches)	RATE FL. OZ./ACRE ¹	HIGH RATE ²
Barnyardgrass	<i>Echinochloa crus-galli</i>	2 to 8	8	16
Broadleaf Signalgrass	<i>Brachiaria platyphylla</i>	2 to 6	8	16
Brome				
California	<i>Bromus carinatus</i>	2 to 6	8	16
Cheat	<i>Bromus secalinus</i>	2 to 6	8	16
Downy	<i>Bromus tectorum</i>	2 to 6	8	16
Ripgut	<i>Bromus diandrus</i>	2 to 6	8	16
Canarygrass	<i>Phalaris canariensis</i>	1 to 4	8	16
Crabgrass				
Hairy	<i>Digitaria adscendens</i>	2 to 6**	8	16
Large	<i>Digitaria sanguinalis</i>	2 to 6**	8	16
Smooth	<i>Digitaria ischaemum</i>	2 to 6**	8	16
Southern	<i>Digitaria ciliaris</i>	2 to 6**	8	16
Crowfootgrass	<i>Dactyloctenium aegyptium</i>	2 to 6**	8	16
Fall Panicum	<i>Panicum dichotomiflorum</i>	2 to 8	8	16
Field Sandbur	<i>Cenchrus incertus</i>	2 to 6	8	16
Foxtail				
Giant	<i>Setaria faberi</i>	2 to 12	8	16
Green	<i>Setaria viridis</i>	2 to 8	8	16
Yellow	<i>Setaria glauca</i>	2 to 8	8	16
Goosegrass	<i>Eleusine indica</i>	2 to 6**	8	16
Itchgrass	<i>Rottboellia cochlin</i>	2 to 6	8	16
Junglerice	<i>Echinochloa colona</i>	2 to 6	8	16
Lovegrass (Stinkgrass)	<i>Eragrostis cilianensis</i>	2 to 6	8	16
Rabbitsfootgrass	<i>Polypogon monspeliensis</i>	1 to 4	8	16
Red Rice	<i>Oryza sativa</i>	1 to 3	8	16

Table 26: Directions for Annual Grasses in Ornamentals

GRASS SPECIES	SCIENTIFIC NAME	WEED* HEIGHT (inches)	RATE FL. OZ./ACRE ¹	HIGH RATE ²
Ryegrass				
Hardy	<i>Lolium remotum</i>	2 to 6	8	16
Italian	<i>Lolium multiflorum</i>	2 to 6	8	16
Seedling Johnsongrass	<i>Sorghum halepense</i>	4 to 10	8	16
Shattercane	<i>Sorghum bicolor</i>	6 to 18	8	16
Southwestern Cupgrass	<i>Eriochloa gracilis</i>	2 to 6	8	16
Sprangletop				
Amazon	<i>Leptochloa panicoides</i>	2 to 6	8	16
Bearded	<i>Leptochloa fascicularis</i>	2 to 6	8	16
Mexican	<i>Leptochloa uninervia</i>	2 to 6	8	16
Red	<i>Leptochloa filiformis</i>	2 to 6	8	16
Texas Panicum	<i>Panicum texanum</i>	2 to 6	8	16
Volunteer Cereals				
Barley	<i>Hordeum vulgare</i>	2 to 6	8	16
Oats	<i>Avena sativa</i>	2 to 6	8	16
Rye	<i>Secale cereale</i>	2 to 6	8	16
Wheat	<i>Triticum aestivum</i>	2 to 6	8	16
Volunteer Corn	<i>Zea mays</i>	4 to 12	6	8
Volunteer Corn	<i>Zea mays</i>	12 to 24	8	16
Volunteer Grain Sorghum	<i>Sorghum bicolor</i>	8 to 12	8	16
Wild Oats	<i>Avena fatua</i>	2 to 6	8	16
Wild Proso Millet	<i>Panicum miliaceum</i>	2 to 10	8	16
Witchgrass	<i>Panicum capillare</i>	2 to 8	8	16
Woolly Cupgrass	<i>Eriochloa villosa</i>	2 to 8	8	16

* Generally occurs between 3-leaf stage and tillering.

**Length of lateral growth.

¹8 fl. oz./A = approximately 0.2 fl. oz./1000 sq. ft.

²16 fl. oz./A = approximately 0.4 fl. oz./1000 sq. ft.

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25%v/v).

Table 27: DIRECTIONS FOR ANNUAL BLUEGRASS CONTROL WITH VOLUNTEER 2EC IN ORNAMENTALS

GRASS SPECIES	WEED STAGE	RATE FL. OZ./ACRE	HIGH RATE
Annual Bluegrass (<i>Poa annua</i>)	to 4-leaf	6	16
Apply under favorable soil moisture and humidity that exists within a few days after rainfall or within 7 days after irrigation. Grass needs to be actively growing at time of application(s).			
Apply at weed stage indicated on the label, as reduced control can be expected with more mature annual bluegrass.			

Use the high rate under heavy grass pressure and/or when annual bluegrass is more mature.

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25% v/v).

DIRECTIONS FOR PERENNIAL GRASSES

- Apply only to actively growing grasses at labeled weed heights.
- Apply when the first grass weed species in a mixed grass weed population reaches the labeled growth stage for treatment.
- Use the high rate under heavy grass pressure and/or when grasses are at a maximum height.

Table 28: Directions for Perennial Grasses

GRASS SPECIES	WEED HEIGHT (inches)	RATE FL. OZ./ ACRE ¹	HIGH RATE ²
<i>Bermudagrass (Cynodon dactylon)</i>			
First Application	3 (or up to 6" runners)	8	16
Repeat Application(s) (if regrowth occurs)	3 (or up to 6" runners)	8	16
<i>Quackgrass (Elytrigia repens)</i>			
First Application	4 to 8	8	16
Repeat Application(s) (if regrowth occurs)	4 to 8	8	16
<i>Rhizome Johnsongrass (Sorghum halepense)</i>			
First Application	12 to 24	8	16
Repeat Application(s) (if regrowth occurs)	6 to 18	6	8
<i>Wirestem Muhly (Muhlenbergia frondosa)</i>			
First Application	4 to 8	8	16
Repeat Application(s) (if regrowth occurs)	4 to 8	8	16

¹8 fl. oz./A = approximately 0.2 fl. oz./1000 sq. ft.

²16 fl. oz./A = approximately 0.4 fl. oz./1000 sq. ft.

Add a non-ionic surfactant containing at least 80% active ingredient at the rate of 1 pt. per 50 gals. (0.25%v/v).

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in a cool, dry place. Do not store diluted spray.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

(Nonrefillable \leq 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Nonrefillable $>$ 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND DISCLAIMER

NOTICE: Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

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